2014 OWNER'S MANUAL



GLACIER BAY Classic Luxury. Smooth Ride.



Dear Glacier Bay owner:

Thank you for being our customer. Welcome aboard!

We wish to take this opportunity to sincerely thank you for putting your trust in our boat building team and becoming the newest member of the Glacier Bay Family.

The following manual is designed to ensure you enjoy your new Glacier Bay for many years to come. We have made every effort to ensure you and your family are safe, enjoy the unique features of a Glacier Bay, and continue to love the Glacier Bay ride that no other boat company can offer.

If you should ever need assistance with the care, maintenance or operation of your boat, then please contact your dealer. If you have questions that your dealer cannot answer, please feel free to contact Phyllis Manning, our customer care manager at 855-662-4855 extension 206 at your convenience or e-mail her at pmanning@glacierbaycats.com.

Once again, thank you for becoming a part of our family.

Best Regards, Glacier Bay

Andrew Brown President

abrown@glacierbaycats.com

Best Regards, Glacier Bay

Phyllis D. Manning Customer Care Manager PH 855.662.4855 x 206

pmanning@glacierbaycats.com

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Chapter 1: Customer Information

1.1 OWNER'S PORTFOLIO

To help you enjoy the many features, benefits, and accessories on your new Glacier Bay, we have provided you with the following materials:

Glacier Bay Owner's Manual (model specific)

Vendor Supplied Manuals for various accessories

Delivery Checklist

Warranty Information

We refer to this package as the "Owner's Portfolio", and will reference it often throughout this text. The portfolio contains a wealth of information, including advice on safety, operation, performance, maintenance, and warranty. Reading and maintaining this information is extremely important, and could be the difference between a positive and negative experience on the water.

For you convenience, Glacier Bay also provides the NMMA text *Sportfish, Cruisers, Yachts Owner's Manual*. It will be referenced occasionally in your owner's manual, and provides supplemental information on safety and basic boating practices.

1.2 WARRANTY INFORMATION

Upon purchasing your new Glacier Bay, the dealer is responsible for completing the warranty card provided by the factory. The Dealer is responsibility for completing the warranty card and returning a copy to the factory. The Dealer should provide you with a copy to keep in a secure place so it can be referenced quickly in the event of a warranty issue. The 10 year limited hull warranty is transferable, and a copy is included at the back of this manual should you decide to sell your boat.

1.3 DEALER RESPONSIBILITIES

Our dealers are an extension of the factory, and we expect them to provide you with great customer service and help prepare you for a positive ownership experience. Therefore, we set forth a list of responsibilities for our dealers as follows:

Provide courteous service and explanation of the product prior to the sale.

Provide sea trials, if requested, for potential owners.

Provide a detailed orientation of your boat's features and general operation upon delivery, including safety and performance.

Complete and sign delivery checklist.

Explain, complete, and submit all warranty information in a timely manner after the purchase.

Provide the customer with the "Owner's Portfolio" and explain the information included therein.

Provide service after the sale, or help the customer locate a qualified service at home or away.

1.4 OWNER'S RESPONSIBILITIES

As an owner you should also take an active part in the delivery and safe operation of your new catamaran. Some of your responsibilities are:

Study and understand the limited warranty information.

Read all literature in your "Owner's Portfolio" and operate the vessel in accordance with those instructions.

Perform a walk through prior to the final delivery and ensure that the systems are functioning properly.

Maintain the boat and perform service according to the instructions in this manual, including the 20 hour inspection for the vessel and engines.

It is your responsibility to return your boat to an Authorized Glaicer Bay Dealer for warranty work.

Once your warranty information is processed, Glacier Bay will maintain a record of your boat using the Hull Identification Number (HIN), which is located on the starboard side of the transom. Information regarding the dealership, owner, and the factory installed accessories will be recorded to help you should a problem arise. Also, you will receive an invitation to join Team Glacier Bay and a survey to rate your purchasing experience and the initial impressions of our company. We ask that you join our family of owners and let us know your feelings about the purchase and the quality of our product.

1.5 Manual Legend

Throughout this manual you will encounter signals to alert of important information. Text printed in bold letters and the warning system shown below is of particular importance. Please review this information prior to reading the manual.

!!! DANGER

this symbol alerts you to hazards or unsafe practices which will cause extensive property damage, severe personal injury or death if the warning is ignored.

!!! WARNING

this symbol alerts you to hazards or unsafe practices which can cause extensive property damage, severe personal injury or death if the warning is ignored.

!!! CAUTION

this symbol alerts you to hazards or unsafe practices which can cause personal injury or property damage if the warning is ignored.

NOTICE

this symbol is not hazard related. it contains information on installation, operation, or maintenance which is needed to ensure the proper operation of your boat.

Chapter 2: BOAT INFORMATION

Please fill out the following information and leave in this manual for reference. This information will be important for our service personnel to provide fast and accurate service. (For service call 866-485-8899 or email service@glacierbaycats.com.)

| BOAT | | | | |
|--|---------------------------|--|--|--|
| | | | | |
| Model: | HIN: | | | |
| Purchase date: | Delivery date: | | | |
| 2 02 02 02 02 02 02 02 02 02 02 02 02 02 | | | | |
| Ingition Key #: | Door key #: | | | |
| | ENGINES | | | |
| | | | | |
| Make: | Model: | | | |
| | | | | |
| Serial # Port: | Serial # Sbd: | | | |
| D 11 M 1 /M 1 1 | D 11 D' (/D') 1 | | | |
| Propeller Make/Model: | Propeller Diameter/Pitch: | | | |
| | TRAILER | | | |
| | | | | |
| Make: | Model: | | | |
| a | | | | |
| Serial # | | | | |
| | DEALER | | | |
| | | | | |
| Name: | Salesman: | | | |
| | | | | |
| Dealer Phone: | Service Manager: | | | |

Chapter 3: BOAT SPECIFICATIONS

3.1 2770 STANDARD BOAT SPECS AND FEATURES

2014 Glacier Bay 2770 Boat Specs

| Length w/ Bow Plpt | Molded Length | Beam (MidSp) | Hull Draft | Freebrd Aft | Trnsm Hght (Eng Sft) | Dry Weight | Frsh Wtr Cap. | W ste Wtr Cap. | Cokpt SF | Trailr Ht (Keel to Hrdtp)* | Bridge Ht (Wtr ine to Hrdtp)* | Max HP | Fuel Cap. | Person Wt Cap. |
|--------------------------|------------------|--------------------------|---------------|----------------|----------------------------|----------------------------|---------------------|----------------------|-------------|----------------------------------|-------------------------------------|--------------|---------------|-------------------|
| 27'0in | 27'0in | 8'9in | 20 | 25 | 25 | 7,200 lbs w/ twin 150's | 20 gal | 15 gal | 35 sf | 8'8" | 10' 1" | 2 x 150 hp | 2 x 90 gal | Yacht Certified |
| | | g clearanc ories whic | | | | e overall din height. | nension (| for the I | nardtop | mast light | when exten | ided, and fa | | |
| Location | 1 | | | | | | | Des | cription | 1 | | | | |
| Bow | | al anchor | lockers | with mo | lded in l | oow pulpit | | | | | | | | |
| Bow | Boy | v seating | for(2) | adults | | | | | | | | | | |
| Bow | Rec | essed wa | alk arou | nd area a | around c | abin | | | | | | | | |
| Bow | 316 | -grade st | ain less | steel box | w rail | | | | | | | | | |
| Cabin | Que | een-sized | berth v | with mat | ching cu | stom pillov | / set | | | | | | | |
| Cabin | Cab | in LED o | verhead | d lights | | | | | | | | | | |
| Cabin | (3) | cabin por | tlights | with curt | ains | | | | | | | | | |
| Cabin | Lov | v profile f | oreded | k acrylic | hatch w | th screen | | | | | | | | |
| Cabin | Loc | kable cab | in do o | r | | | | | | | | | | |
| Cabin | Cab | in mirror | | | | | | | | | | | | |
| Cabin | For | ward stor | age co | mpartme | ent with | storage net | s | | | | | | | |
| Cabin | Sto | rage com | partme | ents und | er berth | | | | | | | | | |
| Cabin | Lon | seal teak | and ho | olly cabin | sole | | | | | | | | | |
| Cabin | Fre | shwater s | ystem | with 20- | gall on ta | ink | | | | | | | | |
| Head | Priv | ate head | area w | ith priva | cy curtai | in, sink, and | showe | r | | | | | | |
| Head | Mar | rine head | with 19 | 5-gallon | hold ing 1 | ank and ov | erboard | discha | arge | | | | | |
| Helm | | erglass to rage | p with | alum inui | n frame | , integrated | VHF b | ox, o ve | rheadl | ights, (6) | rocket lau | nchers, spr | eader ligh | t and life jacket |
| Helm | Full | wrap-arc | ound te | mpered | safety g | lass winds h | ield wit | h cente | ervent | | | | | |
| Helm | Sta | rboard w | inds hie | ld wiper | with fres | hwater was | sher | | | | | | | |
| Helm | Del | uxe helm | bench | seat with | nflip-up | bolster and | arm re | st | | | | | | |
| Helm | Erg | o nomic d | lash lay | out capa | bleofa | 12-inch scre | en | | | | | | | |
| Helm | 316 | -grade st | ain less | steel ste | ering wh | reel | | | | | | | | |
| Helm | (2) | recessed | stainles | ss steel c | up-holde | ers at the he | elm | | | | | | | |
| Helm | | rboard en tional frid | | | | n fresh wate | ersink v | vith Co | rian to | p, stainle | ss cup-hold | der, and tip | out trash | receptacle |
| Helm | Por | t side L-k | ounge s | eating fo | or (4) ad | ults with cus | shioned | backs | and lar | minated 1 | oot rests | | | |
| Helm | Inst | ılated 132 | 2-quart | L-lounge | storag | e cooler wit | h overb | o ard d | rains | | | | | |
| Helm | Con | npanion | grab rai | il | | | | | | | | | | |
| Helm | Bat | tery selec | ctswite | hes with | parallel | capability | | | | | | | | |
| Helm | Jen | sen marir | ne stere | eo systen | n with (4 |) speakers, | iPod co | ntrols, | NOAA | Weathe | rband, and | AUX/MP | 3 port | |
| Stern | | erglass er rage drav | | ment ce | nter/wei | bar with 2 | o-gallor | overb | oard di | raining liv | ewell, (4) s | tainless st | eel cup-ho | lders, and (4) dr |

2014 Glacier Bay 2770 Boat Specs

| Stem | Port and starboard boarding steps |
|-------|---|
| Stem | Raw water washdown with hose quick disconnect |
| Stem | Port and starboard deck caps with rod and gaff storage for (6) rods |
| Stern | Insulated 100-quart port and starboard floor fishboxes with macerator pumps (optional generator replaces starboard box) |
| Stem | Cockpit LED courtesy lights |
| Stern | (4) gunwale-mounted stainless steel rod holders |
| Stem | (2) 90-gallon 2013 EPA approved polyethylene fuel tanks that do not rust and will not emit gas odors |
| Stern | Walk-through transom with fiberglass door and heavy duty latch, (2) stainless steel cup holders, and bolsters |
| Stem | Freshwater pull-out transom shower |
| Stem | Dual, flush-mounted fold-away aft seats |
| | |

3.2 Standard Equipment on all Glacier Bays

2014 Glacier Bay Standard Equipment on All Boats

| Location | Description |
|--------------|---|
| Construction | |
| Construction | Engine lower units are factory-fitted with fin systems that carve through turns and act as stabilizers as speed increases, enabling smooth, fast offshore performance even in the roughest seas |
| Construction | All-composite hull construction filled with foam for basic flotation and strength. Hulls are reinforced with a bonded stringer grid system consisting of cross-bulkheads and longitudinal stringers. |
| Construction | Large PVC rigging tubes in the hulls carry all standard and option wiring and provide ample additional room for custom-rigged electronics in a safe, non-chaffing environment |
| Construction | High-density fiberglass-reinforced composite transoms are further strengthened by the addition of aluminum plates in engine- mounting areas |
| Construction | Exterior upholstery is custom-made of premium marine vinyl and open foam cushion material that will not absorb water |
| Construction | Standard stainless deck hardware is 316-grade stainless alloy superior corrosion protection in salt water environments |
| Construction | Non-skid fiberglass liner has molded in diamond-patterned non-skid on all walking surfaces for non-slip safety and easy clean- up |
| Construction | 12-volt accessory outlet at the dash provides a charge for cell phones, back-up electronics or a quick plug in for a spot light when needed |
| Construction | Aft cockpit coaming bolsters are standard equipment in all Glacier Bay boats with forward bolsters standard on center cockpit models |
| Construction | Hardtops or T-tops with heavy-duty aluminum frames are standard equipment and designed with lighting, life jacket storage and electronics backing plates built-in |
| Construction | International lighting, using long-lasting, low temperature, and low amperage LED lights, complies with yachting standards throughout the World |
| Construction | Stainless steel cup holders all around the boat will not deteriorate from UV rays |
| Safety | Glacier Bay catamarans carry a ten-year structural hull warranty that offers a transfer option giving you security and a higher resale |
| Safety | Glacier Bay catamarans carry the NNMA certification seal. That means that construction, electrical systems, and design specifications are certified by the National Marine Manufacturers Association and the American Boat and Yacht Council. All 2012 Glacier Bay catamarans are also Yacht-Certified by the ABYC. |
| Safety | Full fiberglass liners insure watertight integrity |
| Safety | Cockpits are self bailing with a minimum of (4) large scuppers to drain water quickly and make clean up a snap |
| Safety | LED cockpit, courtesy lights, work lights and navigational lighting provide long life and very low amperage draw |
| Safety | Hydraulic tilt-steering system with tilt helm uses a stainless single-cylinder, dual tie bar system between the engines for fail- safe security |
| Safety | Engine propulsion systems are isolated with individual starting, fuel and electrical systems for one engine get-home capability |
| Safety | Water-tight connectors below the water-line increase longevity of the electrical systems and make replacement of components safe, swift and easy |
| Safety | Individual battery switches for both the starting and house batteries offer parallel cross-over starting capability through the house battery bank |
| Safety | Swim platforms between the engines with built-in dive ladders are great for swimming and diving and are accessible from outside the boat |
| Safety | (6) pull-up cleats with backing plates provide security and safety and push down and out of the way when not in use |
| Safety | Cockpit toe rails provide foot holds for no-hands security when an extra hand is needed |
| Safety | Water-resistant bilge hatches give easy access to bilges for safety checks, repairing equipment or managing seacocks |
| Safety | (4) 500-GPH bilge pumps quickly evacuate water from the hulls: (2) aft and (2) forward |
| Safety | Polyethylen e fuel cells never corrode and are double pressure checked in the factory then tested again as a system after the tanks are installed |
| | |

3.3 2770 OPTIONS LIST

2014 Glacier Bay 2770 Boat Options

| Location | Description |
|----------------|--|
| Accessories | Entertainment center grill with transom mounts |
| Accessories | Heavy duty, reinforced, stainless steel lifting eye |
| Accessories | Lewmar freefall windlass for bow pulpit with rode, chain and aluminum anchor |
| Accessories | Removable L-lounge dinette table |
| Accessories | Stainless refrigerator (replaces trash receptacle) |
| Canvas | Strataglass curtain package |
| Electronics | Cruiseair® 8,000 BTU heating/ cooling unit with vents to the cabin and cockpit |
| Electronics | Electrical conversion kitto 220/240v power |
| Electronics | Shorepower with battery charger, cordset, receptacles and microwave |
| Engine Package | Suzuki 150 4-stroke package (twin counter rotating engines, rigging, controls & stainless props) |
| Engine Package | Yamaha 150 4-stroke package (twin counter rotating engines, rigging, controls & stainless props) |
| Graphics | Glacier Bay traditional graphics package |
| Hull Colors | Cobalt Blue 2-tone hull color |
| Hull Colors | Cobalt Blue full hull color |
| Hull Colors | Custom 2-tone hull color |
| Hull Colors | Ice Blue 2-tone hull color |
| Hull Colors | Ice Blue full hull color |
| Steering | Power-assist steering with 13" stainless wheel |

Chapter 4: SAFETY AND REGULATIONS

4.1 OPERATOR RESPONSIBILITIES

Prior to enjoying your Glacier Bay, it is important to read and understand all the information detailed in your "Owner's Portfolio". Knowing how to operate and maintain the systems on your vessel can make your experiences safe and enjoyable, as well as increase the performance and longevity of your boat. Federal law and most state laws clearly indicate that it is the operator's responsibility to maintain their vessel, and to operate it in a manner which protects the safety of their passengers and others. Reference page 10 of the *Sportfish, Cruisers, Yachts Owner's Manual* for a detailed list of owner responsibilities.

This manual will provide you a basic understanding of boating practices; however, we recommend all owners review federal, state, and local regulations regarding safety and traffic prior to using your Glacier Bay. The U.S. Coast Guard Auxiliary and U.S. Power Squadrons offer excellent educational opportunities on a local level and are open to anyone. If a chapter does not exist in your area, reference page 10 of the *Sportfish, Cruisers, Yachts Owner's Manual* or contact the following numbers for other educational opportunities:

Boating Education Hotline 1-800-336-BOAT (2628)

U.S. Coast Guard Boating Hotline 1-800-368-5647

4.2 REGISTRATION

Vessels are required by federal and state law to be registered in the state where they are primarily used. Registration numbers and validation stickers must be displayed per regulations, and a certificate of registration must be on board while the vessel is being operated. When traveling away from your home waters, contact authorities at your destination to determine if any additional registration is required. Some areas require permits or temporary registrations to operate in their waters. When completing registration forms you will be asked for the Hull Identification Number (HIN). On your Glacier Bay, the HIN is located on the starboard side of the transom. This number is unique to your boat and will be important for registering your vessel, as well as, communicating with your dealer and our service department. Including this information in any correspondence or conversations will help our support network serve you better.

4.3 COAST GUARD REQUIRED SAFETY EQUIPMENT

Once you have reviewed safe boating guidelines and filed for registration, it is time to equip your vessel. The U.S. Coast Guard's (U.S.C.G.) list of required equipment is shown below. To review the guidelines for each item, reference pages 23 and 24 of the *Sportfish*, *Cruisers*, *Yachts Owner's Manual*.

Audible Signaling Device (Bell, Horn, or Whistle)

Fire Extinguisher

Navigation / Anchor Lights

Flotation Devices (PFD's)

Visual Signaling Devices

NOTICE

Remember to check with state and local agencies to ensure that additional items are not required to operate your boat in their waterways.

4.4 RECOMMENDED SAFETY EQUIPMENT

Although not required, there are several additional items which help to ensure safety, and provide convenience for you and passengers. A list of these items can be found in the *Sportfish*, *Cruisers*, *Yachts Owner's Manual* on page 24. Perform an annual inventory to keep tools, spare parts, and safety equipment in good condition. Immediately replace any items that have been removed from the kit.

!!! CAUTION

Use only marine grade replacement parts. Most automotive and residential parts are not suitable for use in the harsh marine environment. Using them could lead to premature product failure, property damage, or personal injury.

4.4.1 <u>Capacity Information</u>

On all boats under 26 feet in length, the manufacturer is required to provide capacity information. If you own a model under 26 feet in length you will find a rectangular metal plate near the helm. This plate will provide information on horsepower ratings and total capacities which include person capacities, motor(s) and gear. As an owner you should be aware of the weight on board. Exceeding capacity can endanger your passengers and vessel, as well as void any warranty remaining on the boat should a failure occur. Remember this is a guideline for normal operation, and does not release you from responsibility should an accident occur. You must use rational judgement when adverse conditions are expected, and reduce your loads to create a margin of safety.



This label means your Glacier Bay is certified by the NMMA. With this tag, you are assured your fuel system, electrical system, lighting, ventilation, and steering are not only in compliance with the US Coast Guard regulations, but also meet the more stringent standards of the NMMA. The NMMA is a national trade organization serving all elements of the recreational boating industry including manufacturers of boating equipment. With this tag, you can have confidence in the safety of your boat.



Pursuant to NMMA certification, all Glacier Bays over 26' in length are "Yacht Certified" and carry the placard shown below. Person and gear capacities are not predetermined, they are left to the operator's

discretion. Therefore, the amount of load allowed onboard should result from considering all safety precautions.

Horsepower ratings, however, are set by Glacier Bays and should not be exceeded. The second page in Section 9.2 of this manual will provide information on the maximum horsepower ratings for your boat. Exceeding the factory recommendation will result in loss of warranty coverage on your vessel.

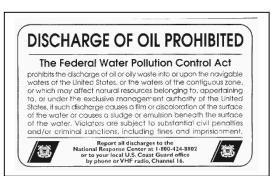


4.5 POLLUTION REGULATIONS

The Refuse Act of 1899 prohibits throwing, discharging or depositing any refuse matter of any kind (including trash, garbage, oil and other liquid pollutants) into the waters of the United States. This information is provided in a pamphlet, that normally received when registering your boat. Use the information below as a guideline, but study the pamphlet and understand any local regulations regarding pollution control. As the operator, you are also liable for individuals on your vessel disposing of materials in an improper manner.

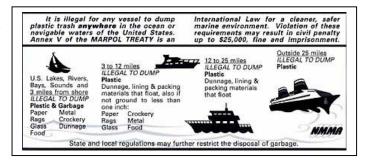
4.5.1 Oil and Hazardous Substances

The Federal Water Pollution Control Act prohibits the discharge of oil or hazardous substances which may be harmful into U.S. navigable water. Vessels 26 feet in length and over must display a placard at least 5 by 8 inches, made of durable material. The placard must be installed in a conspicuous place in the rigging compartments or near the bilge pumps and state the following:



4.5.2 Disposal of Plastics/Dunnage/Garbage

Boats 26 feet in length and over must display a Save Our Seas Placard which outlines the rules for dumping waste offshore. The placards must be at least 4" x 9" and should be displayed in an area visible during normal operation. They can be purchased from your dealer or marine equipment suppliers.



4.6 BOATING SAFETY GUIDELINES

As an owner/operator you should be prepared to handle any situation which arises before departure, while underway, or upon return to dock. Careful planning will add safety and pleasure to your experience and give you the confidence to handle emergencies if they develop. Listed below are some general guidelines which you should follow before any trip:

4.6.1 <u>Pre-Departure</u>

Establish a float plan and provide it to a person whom you trust. The plan should give the details of your trip, including where you are going and when you expect to return. If you deviate from the plan, notify that person as soon as possible.

If you anticipate operating in a new area, understand the local rules and request charts or information on any hazards you may not be aware of.

If you are towing the boat, inspect the trailer including tires, lights, brakes, winch, and overall mechanical appearance. Sportfish, Cruisers, Yachts Owner's Manual page 105.

Verify that you have all necessary safety equipment. This should include all the USCG required equipment as well as spare parts or other items you decided to include.

Check fuel levels and determine if you require additional fuel for your trip.

Examine the weight of the gear on your vessel and make sure you are not overloaded. Distribute the weight evenly on your vessel to ensure predictable performance.

4.6.2 <u>Launching</u>

- Prepare your boat prior to backing down, (i.e. secure all lose items, install garboard drain), then launch your vessel and move away quickly.
- Move your vessel away from the dock and complete a full system check. Ensure that electronics, pumps, and safety equipment are in working order.
- Instruct a passenger on the operation of the boat, and the location and function of all safety equipment onboard. You should never be the only person capable of safely operating your vessel.

4.6.3 <u>Underway: (See Chapter 5 on Performance)</u>

- Obey all "Rules of the Road" and any local regulations. Use the information located on page 13 of the *Sportfish, Cruisers, Yachts Owner's Manual* to understand right of way and the various navigational and hazard indicators you will see on the water.
- Never operate a boat under the influence of alcohol or drugs.
- Do not allow individuals under the age of 16 to operate the vessel. Maintain direct supervision of inexperienced operators.
- Ensure that all passengers are safely seated while underway, and are using the hand rails Glacier Bay has provided to remain securely in their seats.
- Use your electronics and judgement to remain abreast of changing weather. Storms develop quickly and you should be prepared to protect your passengers and vessel. See page 22 of the *Sportfish*, *Cruisers*, *Yachts Owner's Manual* for more tips on weather.
- Maintain a safe speed and respect other boaters as well as those on land. Obey all "No Wake Zones" and be aware of smaller vessels. The wake you produce could endanger other crafts and their passengers.
- Know the limitations of your craft and your experience. Understand the boats handling characteristics and do not attempt to operate the vessel in conditions that are unsafe or beyond your experience level.

4.6.4 Returning

- Obey navigational markers and be aware of any tidal changes since departure.
- Collect and dispose of refuse properly to maintain our waters for future generations.
- Prepare your boat for loading before moving to the dock. Quickly pull your vessel from the water and move away from the ramp to complete the preparation for trailering.
- Verify that trailer systems are working properly and all items are secured before leaving.
- Wash the boat and perform general maintenance, upon returning home. (See instructions in Chapter 5).

As stated above, these are only general guidelines for safe boating. We recommend using these and any other available resources to protect your passengers as well as your vessel. Checklists can be an important tool in accomplishing this, see the example on pages 44 & 45 of the *Sportfish, Cruisers, Yachts Owner's Manual*.

4.7 TRAILERING

Due to the nature of the hull, catamarans require specialized trailers. Your dealer will be able to provide them, as well as, information on safe trailering practices. Tow vehicles should be rated to handle the load and

stresses which accompany trailering your boat. A properly matched trailer should carry 5-10% of the total vessel weight on the tongue. Routine inspections should be performed on the vehicle and trailer prior to each trip, and thorough checks scheduled on an annual basis.

4.8 ANCHORING

Glacier Bay offers an anchor and anchor windlass as optional equipment on all boats. The anchor we supply is known as a plow style. However, there are several types of anchors available, each designed to operate in specific bottom conditions. Your dealer can provide information on which styles are most effective in your area. See page 56 of the *Sportfish*, *Cruisers*, *Yachts Owner's Manual* for more information and tips concerning anchoring.

!!! CAUTION

Never anchor your boat off the stern. The weight at the transom, combined with adverse sea conditions could allow water to enter the boat over the transom wall.

4.9 SHALLOW WATER

Although your Glacier Bay draws a small amount of water for its size, shallow water should be a concern of all boaters. To avoid this hazard, pay particular attention to navigational markers and know the area you are operating in. Be aware of tidal changes, including those that have occurred during your trip. Rocks, stumps, or other hazards are more prevalent in shallow water and can cause major damage to your hull bottom. Engines can also suffer damage if they are allowed to run in the sand or mud.

If you do become grounded, tilt the motors up to reduce the draft at the transom. Often this will solve the problem; however, it may be necessary to rock the boat from side to side to break the suction along the keel. If you are grounded on an incoming tide, allowing the water to rise can help. Being grounded on an outgoing tide is a larger issue, you need to act quickly to free your boat and avoid being driven further aground. Use the anchor to secure the boat and await the incoming tide, or use it to pull yourself free.

4.10 EMERGENCY SITUATIONS

Unfortunately, even the safest boating practices cannot eliminate the potential of emergency situations developing. Therefore you should prepare yourself, and your crew, to handle any problems that may arise. Establish specific plans for fires, man overboard, collision, etc., and review them with your passengers prior to departing. Planning allows people to remain calm, and gives everyone the confidence to resolve the problem. Section 4 of the *Sportfish*, *Cruisers*, *Yachts Owner's Manual* provides information on emergency procedures. Below is important information which all owners should be aware.

4.10.1 <u>Emergency Stop Switch</u>

Lanyard clips are provided on all Glacier Bays and when used properly provide an emergency stop for the engines should the driver fall from the helm position, or need to perform an emergency shutdown to respond to or avoid an accident. The clip attaches the driver to the ignition panel using a cord. A pull on the cord will release the clip from the shut-off switch on the panel and shutdown the engines. To restart the engines, turn ignition switches to the off position, return binnacle to neutral position insert safety lanyard back into clip and then turn ignition switches back on. This should only be used to prevent or react to accidents, and the operator is solely responsible for the decision.

4.10.2 Communication

If you witness an emergency or become involved in one, you should request assistance via radio communication or visual signals. Review the information in Section 4 of the *Sportfish, Cruisers, Yachts Owner's Manual* for detailed information on how and when to request assistance.

4.10.3 Rendering Assistance

Owners are required by law to render assistance to other boaters involved in an emergency situation such as fire, collision, casualty, etc., as long as it does not endanger your vessel or its passengers.

4.10.4 Reporting Accidents

Federal regulations require that operators involved in an accident file a written account of the situation within 48 hours. Reports should be submitted to the State Boating Law Administrator. You can obtain forms through the USCG or local authorities (i.e. harbor patrol, sheriff or police offices). In the event that a casualty or disappearance occurs as the result of an accident, you must notify the authorities immediately by phone or radio and fill out a written statement.

4.10.5 Weather

Pay attention to weather patterns. If you find yourself in the path of a storm, seek shelter immediately. If you cannot reach a dock, seek refuge inside the boat while the storm advances. Never get in the water, and stay clear of metal components on your boat. If lightning strikes, it would likely pass through metal objects seeking a ground.

4.10.6 Towing

Due to an accident or loss of power, it may become necessary to tow another vessel or have your boat towed. If you are providing assistance, never attempt to tow a boat larger than your own. Be certain to use proper lines (ropes) and rational judgement to prevent further damage. Tow lines are under heavy strain, therefore passengers should remain clear of the lines to protect themselves from injury. For more information on towing, reference page 39 of the *Sportfish*, *Cruisers*, *Yachts Owner's Manual*.

4.11 CARBON MONOXIDE (CO)

!!! DANGER

Carbon Monoxide (CO) is a colorless, odorless, and tasteless gas produced by the exhaust system of any combustible engine. CO can cause brain damage or death, if inhaled over an extended period of time. To protect yourself and your passengers, never block the ventilation outlets in cabins, consoles, or other enclosed spaces.

One of the most important considerations when dealing with boating safety is carbon monoxide. Commonly referred to as (CO), carbon monoxide is a colorless, odorless, and tasteless gas emitted from any engine exhaust. Including inboards and outboards. A CO particle is close in weight to the air we consume; therefore it does not rise or fall in the atmosphere, but accumulates in enclosed spaces. Boat owners with enclosed heads, cabins, or canvas enclosures should pay particular attention to CO. Be aware that fumes produced on your boat can affect other vessels and other boats can affect you. A primary concern is the use of generators when boats are moored adjacent to each other.

Carbon Monoxide is poisonous and potentially fatal if inhaled over an extended period of time. Symptoms of CO poisoning include:

- 1. Dizziness
- 2. Nausea / Vomiting
- 3. Headache / Throbbing in the temples
- 4. Fatigue
- 5. Muscular twitching
- 6. Inability to focus or think clearly

If you or any of passengers experience any of these symptoms, leave the area and find a source of fresh air immediately. If your symptoms persist, seek medical attention.

Chapter 5: Performance

5.1 OVERVIEW

This chapter will provide information on the performance characteristics of your catamaran. This is not a substitute for seamanship training or hands-on experience. First time boat owners should use the resources detailed in Chapter 1 to learn proper methods of boat operation. Experienced boaters who have never owned a catamaran, should study this chapter completely. Do not assume that previous boating experience will apply to all situations, as there are several subtle differences in the handling characteristics of twin hulled boats. For existing catamaran owners, this chapter should be a reference.

5.2 MOTOR TRIM

All Models should have weight centered amidships when running at speed. Trimming engines so the boat is running level is normally best for a soft ride. We've also had very good luck with Doelcher "Doel Fins". Typically, you will see about 4% fuel economy increase, combined with a very noticable decrease in side to side roll underway and at rest. The Doel Fins also increase your ability to trim bow up or down. Doel Fins work best with engines over 360lbs for example Honda 130's or Yamaha 150 HPDI's. On smaller lighter engines you may find the Doel Fins add too much lift. You may find that one Doel Fin installed on the outside edge of each engine works well with the lighter engine application. If you feel the ride is not feeling great, we recommend trim up, or down, or increase the speed, 80% of the time makes a solid improvement. If the ride still hasn't improved you may need to slow down. Trim adjustments also can dramatically improve your speed and fuel economy. Find that spot where the speed and RPM climb to their max without a throttle change. Too much weight forward may cause spray to come aboard or in severe conditions, the boat could plow through the waves. When running alone or lightly loaded at high speeds, do not trim the engines too far out from the transom or dangerous bow lifting could result. NEVER TAKE ANY BOAT TO THE POINT WHERE YOU DO NOT FEEL IN CONTROL!

5.3 Engine Controls

All factory rigged boats will come equipped with a binnacle control specific to your type of engine. Located at the helm, the binnacle controls the throttle, shift, and trim mechanisms for your engine. For diagrams and general information about this system, review pages 80 thru 83 of the *Sportfish, Cruisers, Yachts Owner's Manual*. Also read the owner's manual provided by your engine manufacturer to determine how to operate the features on your binnacle. If any components of this system need to be replaced, be certain to use the same style and length as the original equipment.

5.4 Steering Controls

Catamarans offer unsurpassed steering control. The wide spacing of the engines, advanced steering components, and handling characteristics of the Glacier Bay hull give operators exceptional maneuverability in even the tightest spaces.

Because of the superior tracking abilities of the Glacier Bay hull, oversteering can present a problem, especially for owners accustomed to operating conventional boats. Conventional vessels have a tendency to lose tracking abilities in rough and following sea conditions, making constant course corrections necessary. However, catamarans do not exhibit those traits and require operators to take a "hands off" approach. To do so, relax your grip and fight the urge to make constant corrections.

5.5 Steering Maintenance

Glacier Bays are equipped with a hydraulic steering system, featuring a single steering cylinder mounted on the aft tunnel tieing both port and starboard engines together with a stainless steel link arm.

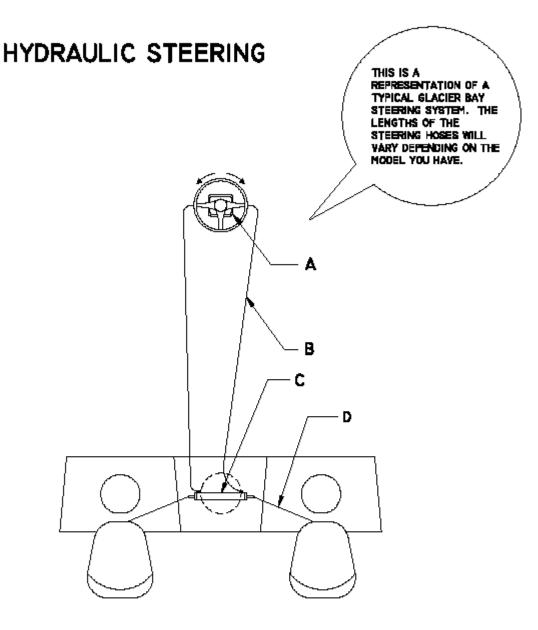
In order to maintain the excellent steering characteristics of your boat, occasionally you will need to visually check all hoses and fittings for leaks and fluid levels. We also recommend checking your link arms to insure all bolts and nuts are still tight.

Similar to hydraulic braking systems in an automobile, it may become necessary to bleed the steering system occasionally to remove air from the lines. We have provided diagrams of the steering system in section 5.6 thru 5.9 and the TeleflexTM owner's manual in your "Owner's Portfolio". Use the resources, and your dealer, to keep the steering system in excellent working order. Be aware, these are routine maintenance procedures and are not covered under warranty by Glacier Bay.

!!! CAUTION

Routinely check hydraulic fluid levels, and all connections for leaks or any sign of mechanical failure. Lubricate all mechanical parts at least annually with high quality marine grease. Failure to do so may result in impaired or unresponsive steering.

5.6 STEERING SYSTEM DIAGRAM - STANDARD



| <u>ITEM</u> | <u>DESCRIPTION</u> | QUANTITY |
|-------------|--------------------|----------|
| A | SEA STAR II HELM | 1 |
| В | STEERING HOSE | 2 |
| ¢ | STEERING CYLINDER | 2 |
| D | LINK ARM | ż |

5.7 Steering System- Bleeding Instructions

Reference the bleeding instructions provided by the TeleflexTM owner's manual, which is included in your "Owner's Portfolio". Use them in conjunction with the instructions and diagram below to bleed the steering system. This should be done annually or when air is detected in the system.

NOTICE

If possible, have your dealer or trained marine technician perform routine maintenance or repairs on your steering system. Replace faulty parts immediately.

5.7.1 <u>Step 1</u>

Using a filler tube, fill the helm with oil. When completed, you should be able to see oil in the filler tube. Do not proceed with step two until helm is full of oil.

5.7.2 <u>Step 2</u>

Open the bleed fitting labeled #1 and pull the cylinder shaft all the way out on the fitting #1 side.

Holding the shaft to prevent it from moving back into the cylinder, have someone turn the wheel clockwise until a steady stream of oil flows through the fitting.

Close bleed fitting #1.

5.7.3 <u>Step 3</u>

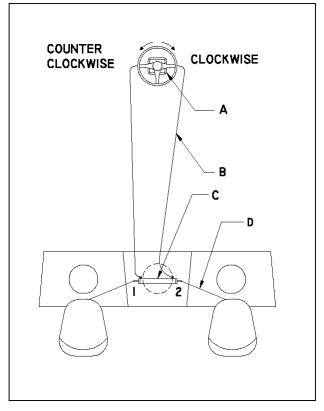
Open the bleed fitting labeled #2. and pull the cylinder shaft all the way out on the fitting #2 side.

Holding the shaft to prevent it from moving back into the cylinder, have someone turn the wheel counter-clockwise until a steady stream of oil flows through the fitting. Close bleed fitting #2.

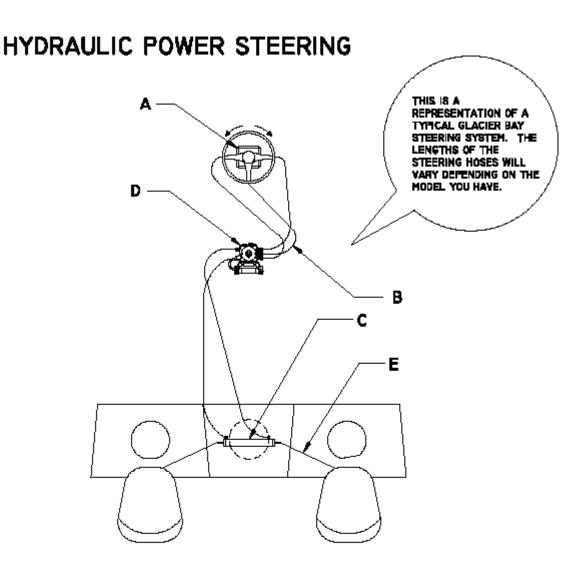
5.7.4 <u>Step 4</u>

When you complete the bleeding process, turn the wheel

hard over in each direction at least twice. Then manually adjust the cylinders by pulling the shaft all the way out on the same side of each cylinder and closing the steering system valve.



5.8 POWER STEERING SYSTEM DIAGRAM



| <u>ITEM</u> | DESCRIPTION | OLIMNTITY |
|-------------|------------------------------|-----------|
| A | SEA STAR II HELM | 1 |
| В | STEERING HOSE | 3 |
| C | STEERING CYLINDERS | T. |
| D | TELEFLEX POWER STEERING PUMP | 1 |
| E | LINK ARM | 2 |

5.9 Power Steering System- Bleeding Instructions

Reference the bleeding instructions provided by the TeleflexTM owner's manual, which is included in your "Owner's Portfolio". Use them in conjunction with the instructions in section 5.7 bleeding the steering system. This should be done annually or when air is detected in the system.

NOTICE

If possible, have your dealer or trained marine technician perform routine maintenance or repairs on your steering system. Replace faulty parts immediately.

5.10 Handling Characteristics

Glacier Bay has full displacement hull. Displacement hulls provide superior handling characteristics, even at low speed, and an improved ride in rough water. Our proven design provides a superior ride, excellent handling characteristics in a variety of conditions, and speed with economy of operation. To help you experience the softest ride, study the following sections.

5.10.1 <u>Turning Characteristics</u>

Turning a catamaran is slightly different than cornering on a conventional vessel. Imagine the difference between an automobile and a motorcycle. Automobiles take turns in a flatter, more stable, manner similar to catamarans hulls, while motorcycles pitch hard into a turn similar to a monohull. Do not underestimate a catamaran's cornering ability however, hard adjustments to the steering wheel can make a Glacier Bay bite quickly and execute high performance turns. Experiment with the handling ability of your cat so you are prepared for any situation on the water.

5.10.2 Adverse Sea Conditions

Catamarans are designed to handle some of the roughest waters in the world, but that is no substitute for common sense. As an operator you are responsible for the safety of your passengers and vessel; therefore, your trips should be limited by your level of experience. Planning and paying constant attention to the weather and sea conditions is paramount. If you are forced to operate in dangerous seas however, you can be confident that your Glacier Bay, when operated properly, can handle them safely. Following are some tips on how to handle your boat in adverse sea conditions:

- 1. When traveling into the wind, changing your direction a few degrees to allow one sponson to settle before the other, can make the ride smoother and allow for increased speed.
- 2. In a rough chop with short wave intervals, increasing your speed may allow the boat to skim across the tops of each wave. This will result in a smoother ride.
 - 3. Steer to avoid larger swells and breaking waves.
- 4. In a following sea, position your vessel on the back of a wave and match its speed to remain ahead of the trough. Speed is paramount. Work the throttle to avoid going over the wave or being thrown down the face of a following wave.

5.10.3 <u>Boating Tips</u>

Experience is the best way to determine the handling characteristics of your catamaran. Operating the boat in multiple sea conditions and under various loads will help you predict how the boat will perform in any situation. Glacier Bay provides the following recommendations regarding the performance of your catamaran:

- 1. Establish an RPM chart which details the speed and fuel consumption at various RPM levels to achieve the most economical operation.
 - 2. Monitor fuel gauges to determine the amount of operating time remaining at a given reading.
 - 3. Determine minimum speed for effective steering in close quarters.
 - 4. Determine the turning radius required at various speeds.
- 5. Determine the rates of acceleration and deceleration with various load conditions. Include the distance required to stop the boat at various speeds.

Use the information provided in section 6 of the Sportfish, Cruisers, Yachts Owner's Manual for more

information on boat handling.

5.11 Performance Factors

Proper setup and maintenance of the systems on your boat is important to ensuring proper performance, but be aware they are not the only factors which affect it. Several things which contribute to the level of performance of your catamaran can change between or during trips.

5.11.1 Engine Efficiency

Without proper maintenance, your engine(s) will gradually lose power, resulting in a loss of speed. Use the recommendations in the engine's owners manual to schedule routine maintenance procedures and as a guide for the correct RPM range for your engines. Neglecting to do so may result in loss of performance and an increased risk of failure.

5.11.2 <u>Propeller Condition</u>

The size and condition of your prop also plays a major role in the performance of your catamaran. A damaged prop can result in lower speeds, sudden drops in RPM, increased fuel consumption, and severe vibration while running. Improperly sized props can cause damage to your engine as a result of exceeding the maximum or minimum RPM levels.

5.11.3 Weather Conditions

Barometric pressure and humidity can affect the output of your engines. For example, on an extremely hot and humid day, your engine can experience as much as a 10 percent loss in horsepower. Although you should monitor your engines' performance, be aware that the weather could be a major factor in your boats performance.

5.11.4 Load

Increased load can obviously affect performance, especially if the load is unbalanced. Passengers, gear, and fuel are all examples of things which can affect your vessel. Fuel levels change through the day, and greatly affect the attitude of your boat. When necessary, make adjustments to engine trim and load distribution to compensate for fuel usage.

5.11.5 Marine Growth

If you store your boat in the water or fail to clean it after each trip, the existence of marine growth can contribute to a loss of performance. A decline in speed or increased fuel consumption can occur. Prevent this by applying a marine growth inhibitor or by cleaning your boat thoroughly after each trip.

5.11.6 Bottom Paint

Bottom painting your catamaran will also change the performance. Although not significant, you can expect a drop in speed between 1 and 5 miles per hour.

Chapter 6: Systems Information

6.1 OVERVIEW

This chapter will provide you with basic information for all the systems on your boat. Understanding this information is imperative, as it directly contributes to the safety and enjoyment of your trips on the water. If you need further information on any of these systems talk with your dealer.

6.2 FUELING GUIDELINES

Study the following guidelines thoroughly, and consult your dealer if you have questions. Be sure to read the engine manufacturers recommendations regarding the type and grade of fuel to use for your engines. If you are using a 2 stroke outboard engine, be sure to fill the oil tanks with manufacturer approved oil during each fill-up.

!!! WARNING

Avoid methanol or other alcohol based fuels or additives which can deteriorate fuel hoses, Alcohol based fuels also absorb water which can lead to engine damage.

!!! DANGER

Follow all safety guidelines while fueling. Leaking or spilled fuel is an explosion hazard. Regular checks of the fuel system are needed to protect you and the vessel.

6.2.1 Before Fueling

Shut down the engines and turn off all electrical devices including the batteries.

Close all hatches, portlights, and doors to prevent accumulation of fuel vapors.

Extinguish cigarettes or other lighted materials.

Keep a properly charged and correctly rated fire extinguisher nearby.

6.2.2 <u>During Fueling</u>

Use common sense and obey all safety regulations related to fuel handling.

Avoid static sparks by maintaining contact between the fuel nozzle and fuel fill.

6.2.3 After Fueling

Secure the fuel cap and inspect for leaks.

Clean up any spilled fuel and dispose of the cleaning material accordingly. Do not store fuel soaked material on your boat.

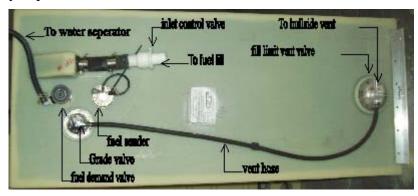
Open all hatches, portlights, and doors to allow for ventilation.

Check for fuel vapors using a "sniff test" and do not turn on electrical devices, including batteries, until you are certain the fumes have dissipated.

6.3 FUEL SYSTEM

Due to the nature of the hull design, each Glacier Bay is equipped with a port and starboard fuel system. These systems act independently, providing fuel to the engine on their respective side. These tanks are constructed of polyethylene material to prevent corrosion, and feature a hull side vent to avoid over-pressurization of the system. This helps eliminate "blow back" and its damaging effects on your gelcoat.

Hoses are NMMA certified, and fittings are clamped securely to reduce the potential for leaks. However, comprehensive checks of hoses and fittings should be completed at least annually, including those normally hidden from view. Tighten all connections, replace deteriorated hoses, clamps or fittings, and replace the fuel/water separators during this check. Glacier Bay has provided inspection plates in the cockpit floor and along the gunwales to assist you with annual maintenance. If you experience fuel flow problems, remove the fuel feed hose from your engine and connect it to a portable fuel tank. Doing so will help you determine if your fuel system or the engine is the source of the problem. Fuel system repairs and engine maintenance should be performed by a qualified marine technician.



The fuel/water separators are installed between the tank pickup and the engine. They are located in the aft rigging space. Inspect these filters regularly and replace when needed.

6.4 ELECTRICAL SYSTEM

The electrical system on your catamaran consists of three major components: the battery system, wiring and circuit protection, and accessories. It is important that you understand the principles of the electrical system, so that you can protect the components and troubleshoot any problems you experience.

6.5 BATTERY SYSTEM

Your Glacier Bay is equipped with three batteries. Two of the batteries are dedicated as "cranking batteries" the third bank controls the DC accessories and is commonly referred to as the "house" bank. To help maintain your batteries, a management system is installed on your boat. In Section 9.1.1 & 9.1.2 of this manual will provide details regarding the location and wiring of your batteries and management panel in section 9.4.5.

6.5.1 <u>Emergency Parallel</u>

In the event of a battery failure, the battery management panel allows you to mechanically link the port "cranking" battery to the starboard engine or vice versa. Please refer to the model specific section for more details.

The push-in or toggle style breakers located across the top of the management panel protect the 24 hour essential circuit wiring. Per NMMA and USCG guidelines, these breakers are constantly energized to provide power for bilge pumps and memory functions. This helps to protect your vessel even when you are not available. The "HOUSE" switch does not need to be "ON" for these breakers to have power. Inspect the breakers regularly, and push-in or flip the toggle to reset. If a breaker trips constantly, have your dealer investigate the problem as soon as possible to prevent damage to your boat.

6.5.2 Anchor Windlass

A 50 Amp breaker is installed at the factory for owners who request the anchor windlass option, otherwise a blank is installed to permit aftermarket additions. If you choose to add a windlass to your boat, contact your dealer for information on selecting a breaker to fit the panel.

!!! DANGER

Disconnect the battery cables from the batteries prior to removing or working on the battery management panel. Failure to do so could result in electric shock. Reference the NMMA pamphlet in your "Owner's Portfolio" for more information.

6.6 BATTERY SELECTION

Glacier Bay supplies the original batteries onboard your vessel. We use both Group 27 and Group 31 batteries. In the event of a failure, replacements must be of equal size and specifications (see below):

GROUP 27 (27MG) GROUP 31 (GDP31DT)

CCA: 840 CCA: 700 MCA: 1050 MCA: 875

RESERVE CAPACITY: 182 min @ 20A **RESERVE CAPACITY:** 182 min @ 25A

6.7 BATTERY CARE

Batteries should be secured in a non-metallic tray and insulated boots should cover the terminals. Depending on the style of battery you choose, inspect the electrolyte and perform routine maintenance as suggested by the manufacturer. Remove corrosion from the terminals quickly to prevent failure. Use a stiff brush and a solution of water and baking soda to remove corrosion, then grease the terminals to prevent further build-up. Be careful to clean up thoroughly to avoid contaminating the electrolyte.

When servicing the batteries, follow the safety procedures shown below and work to avoid electrolyte spills which can harm you and your vessel.

!!! DANGER

All batteries contain an electrolyte, commonly sulfuric acid, which is a caustic and volatile chemical. Use extreme caution when charging or servicing.

6.7.1 Safety

Use protective clothing and accessories such as aprons, gloves, and eye wear to protect yourself while servicing batteries. Avoid cigarettes, open flames, and sparks. Batteries can produce toxic and explosive gases; therefore, store or charge them in a well ventilated space.

Keep batteries out of the reach of children and pets.

6.7.2 Exposure

If you are exposed to the electrolyte solution, follow these procedures and seek immediate medical attention.

EXTERNAL - Flush with large amounts of water for contact with the skin. If severe irritation occurs or it contacts your eyes, seek medical attention immediately.

INTERNAL - Consume large amounts of water or milk, coupled with milk of magnesia. a beaten egg, or vegetable oil. Seek medical attention immediately.

The guidelines above are basic and do not alleviate the owner of responsibility should an accident occur. Use good judgement and common sense to avoid an accident.

!!! CAUTION

When reconnecting your batteries, always connect the black cable to the negative terminal and red cable to the positive one. Reversing them can damage you electrical system and create the potential electric shock.

!!! CAUTION

Never disconnect a battery while underway. Doing so may result in damage to your boat's electrical system and the engine's alternator.

6.8 WIRING AND CIRCUIT PROTECTION

All Glacier Bay are wired using marine grade tin coated copper wire, instead of standard copper wire. Tin coated copper is manufactured to withstand the harsh saltwater environment better than standard copper, which is used for residential applications. Environmentally sealed DeutschTM connectors are installed on all accessories located below the waterline to ensure watertight connections. The remaining devices are installed with high quality splices and terminals, which are heat shrunk to protect the integrity of the connection. Harnesses are routed through PVC rigging tubes to prevent chaffing and covered with sheathing when necessary.

6.9 CONTROL SYSTEM

Glacier Bay 2770 comes equipped with a digital assembly consisting of a control unit and remote switch pod(s). In the digital assembly, the control unit houses the circuit protection for all the accessories controlled by the switch pod(s). A label is mounted on the control unit to advise you which breaker controls a given appliance. If a breaker trips, simply push it in to reset. When possible have your dealer replace defective electrical components. If that is impractical, be certain to use identical replacements to ensure the integrity of the system. Please refer to section 9.4.6 for diagram.

!!! CAUTION

Failing to use the correct replacement breaker could result in failure of the device or damage to the electrical system. Contact your dealer for repair information.

Accessories not integrated into the control unit can include lights with integrated switches, marine head controls, stereos, aftermarket electronics and 12V outlets. These devices draw current from the accessory fuse blocks. The fuse blocks are similar to those found in automobiles, and use snap-in fuses to protect a circuit. You can obtain replacements for these fuses from your dealer or local auto-parts store. Always replace a damaged fuse with one of equal rating.

Ground blocks are another integral part of your electrical system. These are connected to the common battery ground and individual appliances, to provide a path for current flow back to batteries.

!!! CAUTION

When working on your electrical system, disconnect the batteries to prevent shock, or damage to your electrical system. If possible, have an electrician perform repairs.

For customers unfamiliar with electrical systems, Glacier Bay recommends the following book:

Boating Magazine's: Powerboater's Guide to Electrical Systems

Written by: Ed Sherman

Publisher: International Marine (Division of McGraw Hill Companies)

Copyright: 2000 International Marine.

6.10 Accessories

Electrical accessories include all lights, pumps, and gauges assembled into your catamaran. Certain accessories are standard to each model, while others are optional equipment. Below is a list of accessories and their function. Beside each accessory is a list of the boats on which the item is standard. For information on optional equipment see section 3.3 in this manual.

6.10.1 Navigational Lights

Per USCG guidelines, all powered vessels must have navigational and anchor lights. Every Glacier Bay is equipped with navigational lights at the bow, a pole light near the stern, or mast light on the hardtop. These lights must be used in accordance with USCG regulations when anchored or underway.

6.10.2 Cockpit Lights

Cockpit lights are located at floor level to provide light while operating in low light conditions.

6.10.3 <u>Cabin / Console Lights</u>

Lights located in the cabin or in consoles have an integrated power switch and are tied directly into the fuse block. Operate them with the switch located at the base of the light.

6.10.4 Spreader Lights

Attached to the hardtop or hardtop frame, spreader lights illuminate the cockpit in low light situations. They are operated using the switch on the instrument panel and are protected by a fuse block

6.10.5 Bilge Pump / Float Switch

Bilge Pumps evacuate standing water in the bilge. They can be operated manually, or automatically by the float switch. The float switches are connected to the fuses along the top of the battery management panel.

6.10.6 Raw Water Pump

Supplies pressure to the raw water system. It contains a pressure switch similar to a residential well pump. You can leave this appliance on at all times while underway.

6.10.7 <u>Freshwater Pump</u>

Supplies pressure to the freshwater system. It contains a pressure switch similar to a residential well pump. You can leave this appliance on at all times while underway.

6.10.8 <u>Livewell Pump</u>

Supplies water to the livewell system and is activated by the switch pod as follows:

Press one time for continuous operation,

Press two times for a 3 min. "ON" / 3 min. "OFF" cycle

Press three times for a 5 min. "ON" / 5 min. "OFF" cycle.

In traditional switching systems it cannot be cycled in this manner.

6.10.9 Macerator Pump

Used to evacuate waste and debris from fishboxes or to remove waste from marine head holding tanks.

6.10.10 12v Outlets

Located strategically throughout the boat, these outlets provide power to aftermarket accessories such as cell phones, electric reels, and spotlights. Each outlet is independently wired to the fuse panel.

6.10.11 Marine Head

The marine head is powered by the fuse panel, and has a separate control panel mounted near the head. The control panel activates the solenoid to allow for water intake and discharge. A macerator pump is incorporated into the head. See sections 9.1.8 in this manual for operating instructions.

6.10.12 Anchor Windlass (optional)

Use to deploy and retrieve the anchor. This accessory is controlled by a dedicated switch at the helm and can also be controlled at the bow with up & down foot switches. The fuse is located at the battery management panel.

6.10.13 Stereo

Similar to an automotive stereo, the unit can be operated using the faceplate or a remote keypad which is mounted near the helm. It is powered by the fuse block, and the memory wire is connected to a 24 hour circuit.

6.10.14 Windshield Wipers

Operated by a dedicated switch at the helm, these function identically to those found on passenger automobiles.

6.10.15 Horn

Function identically to those found on passenger automobiles.

6.10.16 ACC

"ACC" switches can be used to operate aftermarket products. Be aware of the power requirements for any add-on products, so you do not exceed the capacity of the breaker supplying the switch. Failure to do so could damage the appliance and/or the electrical system.

6.11 Gauge Packages

Glacier Bay provides SuzukiTM and YamahaTM engine packages with manufacturer supplied instrumentation. Below is a list of the standard packages and a description of their function.

6.11.1 YamahaTM

YamahaTM packages feature a three piece digital gauge package on all models with a tachometer for each engine and combination speedometer / fuel management gauge. Instructions on the operation and features of these gauges is included in your engine owner's manual.

6.11.2 SuzukiTM

SuzukiTM packages feature a three or four piece digital gauge package (same as YamahaTM) with a tachometer for each engine, and a programmable multifunction gauge(s). Glacier Bay setups a preliminary program at the factory, but it can be modified to suit your needs. Instructions on the operation and features of these gauges is included in your engine owner's manual.

6.12 PLUMBING SYSTEM

The intake and discharge of water is integral to several of the features and accessories provided on your boat, including livewells, fishboxes, sanitation devices, and water systems. Glacier Bay installs the plumbing components for these systems using high quality marine hoses and stainless clamps. However, this does not eliminate the need for routine checks of plumbing components or connections. A failure resulting from a deteriorated hose or connection, could cause your boat to take on water or become swamped. Information is provided in section 9.4.8 of this manual, regarding the location, function, and routing for the plumbing components on your boat. Review these materials and talk with your dealer should you have a question.

Chapter 7: MAINTENANCE AND SERVICE

7.1 OVERVIEW

This chapter provides basic information for maintaining the original appearance and dependable performance of your Glacier Bay. Although your vessel is constructed of the finest materials available, the harsh saltwater environment and other factors, including geography and usage rate, will affect its finish and function over time. It is imperative that you understand how to care for your catamaran properly. Some simple steps will help maintain its aesthetics, value, and reliability.

7.2 GELCOAT MAINTENANCE

Gelcoat is a thin layer of resin mixed with colored pigments, which provides the exterior finish on your boat. Gelcoat provides a smooth durable surface to protect the fiberglass construction of the hull, but is still flexible enough to absorb the pressure exerted upon it during operation. Mainly used for cosmetics, gelcoat is relatively simple to maintain. However, without routine cleaning, it will discolor due to the microscopic pores in the surface. Following are some instructions for maintaining your gelcoat.

7.2.1 <u>Cleaning</u>

After each trip on the water, or after trailering long distances, you should clean the boat immediately. Washing the boat with mild detergents, such as dishwashing soaps, and fresh water will help eliminate build up or discoloration resulting from environmental pollutants. Use a sponge or other soft cleaning device on the smooth exterior surfaces of the hull and deck. A soft brush can be used when cleaning nonskid portions of the deck. Make sure to rinse the boat thoroughly after cleaning.

!!! CAUTION

Using strong or caustic cleaning agents, such as bleach, citrus based cleaners, or one containing ammonia, will damage the appearance and strength of your gelcoat.

7.2.2 Waxing

Similar to automotive finishes, gelcoat will begin to fade over an extended period of time. Constant exposure to environmental pollutants and this aging process will result in a loss of shine. However, it is possible to restore the original luster and color using a polishing compound (mild abrasive) or a rubbing compound (harsh abrasive). Each will remove scratches, discoloration, and help restore weathered gelcoat surfaces but you should select what to use based on the severity of the problem. Use the following steps to restore the finish of your gelcoat.

- 1. Clean the affected area completely using a mild detergent.
- 2. Gently wet sand the affected area using a fine sandpaper (600 grit) to remove any stains. Use plenty of water and always sand in one direction using curved strokes. Sanding in alternating directions could result in damage to the finish.
- 3. Apply polishing compound to a buffing pad and follow the manufacturers instructions. If you apply the compound mechanically, we recommend a lamb wool buffing pad and a electric buffer capable of 1750 to 1800 RPM.
- 4. When you have completely buffed the area, wash away any remaining compound using clean water.

After thoroughly cleaning the surface, wax the affected area. This will help restore the finish and provide a seal against future discoloration.

!!! CAUTION

Protect metal surfaces when using abrasive cleaners, polishing compounds or rubbing compounds. They can damage the metal's protective finish leading to rust.

!!! CAUTION

When using an electric buffer, maintain constant motion. Allowing the pad to rest on an isolated spot can cause heat buildup, which can damage the gelcoat.

!!! CAUTION

Routinely clean and wax your catamaran to help prevent the need for excessive use of rubbing and polishing compounds, which over time can deteriorate the gelcoat.

By following the instructions listed above you can guarantee that your catamaran will remain in near showroom condition and remain a source of pride for years to come.

7.2.3 Repair

Although gelcoat is a flexible material capable of handling environmental punishment and extended use, it is susceptible to scratches, blistering and cracking over time. Gel coat distortion or cracking is unappealing, but rarely represents any structural failure. Have your dealer inspect any damage to your gelcoat to determine the nature of the failure. If it is only cosmetic, they can provide color matched kits, instructions, and any chemicals you need for application or cleanup. Structural damage should be repaired by your dealer or a trained fiberglass repair shop.

!!! WARNING

Gelcoat and the chemicals used for its application and cleanup are extremely flammable and toxic. Follow all handling and mixing instructions, provide for proper ventilation, and keep water containers nearby to submerse catalyzed materials.

7.3 BOTTOM PAINT

If you intend to leave your boat in wet storage, or routinely dock it for more than a few days, you should coat the hull beneath the water line with anti-fouling paint. This will help prevent marine growth, such as barnacles, which damage the gelcoat and affect performance. Glacier Bay recommends using an epoxy barrier coat prior to boating painting a new vessel. This will help to prevent, but not eliminate, gelcoat blistering on the hull, which is not warranted by Glacier Bay. Your dealer can provide information on bottom painting to protect against environmental toxins in your area. Anti-fouling paints are made to dissolve over time, so inspect and clean the hull bottom annually and recoat when necessary.

7.4 UPHOLSTERY

Basic Stains - Clean with a mild detergent and a soft to medium brush, or an all purpose cleaner such as FantasticTM. Rinse with fresh water after cleaning.

Mildew - Use a 4 to 1 mixture of water and ammonia, brushing the stain vigorously to remove the bacteria responsible for the mildew. If the stain remains, briefly apply bleach to the area and rinse with fresh water.

!!! WARNING

Do not mix ammonia and household bleach. Doing so will result in the formation of deadly chlorine gas. If it is necessary to use bleach, clean up any traces of ammonia and ventilate the work space for a minimum of 15 minutes prior to applying bleach.

Tough Stains or Mildew - Use a mixture of 1 tablespoon of ammonia, 1/4 cup of hydrogen peroxide, and 3/4 cup distilled water. Briefly, apply to the surface, allowing the peroxide to bubble. Rinse with fresh water

7.5 TRIM / PLEXIGLAS / POLYETHYLENE

Glacier Bay uses vinyl, plexiglass, and polyethylene material (StarboardTM) throughout the interior of our catamarans. Use the following instructions to care for these items:

- 1. Use mild detergents to clean vinyl trim commonly used in cabins and helm. Routinely use a commercially available surface protector to seal the vinyl.
- 2. Surface or glass cleaners can be used to clean plexiglass. It is commonly used for radio boxes and as a protective material for instrument panels.
 - 3. StarboardTM can be cleaned using surface cleaners such as 409TM.

7.6 STAINLESS / ALUMINUM

Stainless steel and aluminum are used throughout your vessel. Glacier Bay uses only 316 marine grade stainless hardware and anodized aluminum to provide you with years of service; however, these metals can deteriorate and fail if improperly cared for. Upon returning, clean all hardware using a mild detergent and rinse thoroughly with fresh water. Avoid using abrasive cleaners or chlorine based products, as they will remove the metal's protective coating and lead to pitting or rust. Throughout the year coat the metal using a non-abrasive metal protector to help displace moisture, remove contaminates, and shield the metal. Glacier Bay recommends high quality sealants such as Boeshield T-9TM developed by BoeingTM Aviation. If you cannot find it locally call PMS Products Inc. at 800-962-1732.

7.7 BILGE COMPARTMENTS

Routinely check the condition of the bilge compartments in your boat. This will help identify potential problems and eliminate odors associated with stagnant water and the buildup of residue. Clean the compartments using a freshwater rinse. This will also enable you to check the function of your drain system and the operation of the bilge pumps.

7.8 COCKPIT DRAINS

All Glacier Bays have four drains located in the cockpit, two on both the starboard and port sides. These drains are designed to quickly evacuate the cockpit should the boat become swamped. Flushing these drains routinely will ensure the safety of your crew and vessel, as well as, eliminate the potential for odors associated with fish residue. These drains are evacuated through the scuppers located on the hullside. Each scupper has a rubber flap to prevent water from entering the boat. Check this material occasionally to keep them free of debris and in good working condition.

7.9 WINTERIZATION

Routine maintenance checks should be performed prior to each trip in accordance with Chapter 7, but a broader analysis should be done before winterizing your catamaran and prior to the first trip of the season. If your local climate does not require winter storage, complete the following steps at least annually to ensure the safe operation of your boat.

- 1. Do not leave loose items or personal affects onboard during storage.
- 2. Remove all trash and debris prior to cleaning the boat.

- 3. Before storage clean the boat thoroughly, including exterior surfaces, fishboxes, livewells, and thru hull fittings.
- 4. If possible leave lids open slightly to allow fresh air exchange.
- 5. Remove the garboard drains and store the boat with the bow up to allow drainage.
- 6. Inspect all electrical connections and the operation of pumps or other electrical devices. Perform repairs if necessary. Coat electrical panels with an anti-corrosive spray, available from your dealer.
- 7. Inspect the batteries and charge fully to prevent damage during storage. Disconnect the cables and apply a coat of grease to the terminals to prohibit corrosion.
- 8. Inspect all plumbing components and connections to prevent leaks. Replace any damaged hoses. Drain all lines and devices to prevent damage from freezing.
- 9. Lubricate valves to maintain proper operation. Use the manufacturers recommendations for portable and marine heads.
- 10. Inspect fuel system components and replace fuel/water separators. You can keep the system fuel but do not overfill, and use a fuel additive to prevent condensation.
- 11. Lubricate hinges and coat all metal surfaces with Boeshield T-9TM or other metal protector. Tighten down hardware if necessary.
- 12. Inspect caulking around hardware, windows, hatches, etc. to prevent water damage. Normal use will break down sealants and can lead to costly repairs if not maintained.
- 13. Remove or cover all electrical devices to prevent damage from UV rays. The rays will cloud electrical displays and make them hard to read.
- 14. Remove cushions and store indoors to prevent damage.
- 15. Winterize the engines and controls per manufacturers recommendations and inspect all connections, filters, and parts thoroughly.
- 16. Replace parts as needed.

7.10 Maintenance Schedule

| 7. TO IVIAINTENANCE SCHEDULE | | , | , | , | | |
|-------------------------------------|----------|--------|---------|-------------|----------|-----------|
| Maintenance | Each Use | Weekly | Monthly | Each Season | Yearly | As needed |
| Clean hull below the waterline |) ကိ | ∞ / | ندر | X | <u>\</u> | X |
| Bottom paint the hull | | | | 71 | X | X |
| Check/Replace Sacrificial Anodes | | | X | | 11 | X |
| Wash boat hardware and canvas | X | | X | | | |
| Wax exterior gelcoat | 71 | | 11 | X | | X |
| Clean & protect hardware | | | | | | X |
| Clean exterior upholstery | X | | | | | X |
| Clean cabin & interior upholstery | | | | | | X |
| Flush engines with fresh water | X | | | | | |
| Spray metal components in bilge | | | X | | | |
| Clean bilge | | | | X | | X |
| Check bilge for leaks | X | | X | | | |
| Inspect steering & controls | X | | | | | |
| Inspect fuel systems for leaks | X | | | | | |
| Replace fuel filters | | | | X | X | X |
| Lubricate fuel fill O-rings | | | X | | | |
| Inspect fire extinguisher | | | X | | | |
| Test bilge pump auto switches | | | X | | | |
| Check battery electrolyte & service | | | X | | | |
| Check proper functioning of Pumps | X | | | | | |
| Replace pumps | | | | | X | X |
| Replace gaskets | | | | | | X |
| Inspect & operate thru-hull valves | | | X | | | |

7.11 Maintenance Log

| Service | Engine | | |
|---------|--------|--------|-------------------|
| Date | Hours | Dealer | Service / Repairs |
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7.12 LEWMAR MAINTENANCE

LEWMAR

DECK SWITCH SERVICE UPDATE JUNE 2011

Overview

Electric deck switches operate in a hostile environment and are subject to salt water, extremes of temperature, direct sunlight and UV effect. They are also susceptible to wear and tear following repeated use and can in some instances suffer accidental damage during boat operations. It is therefore recommended that regular visual and functional inspection of the switch, the circuitry and the equipment being controlled is carried out by a competent qualified person on a regular basis.

If any defects are noted on the switch (see point 2.0 below), replacement is mandatory so as to avoid the possibility of a malfunction. It is further recommended that an item of this nature is not intended to remain in service forever. The lifespan will depend upon the weather and UV conditions to which the switch is exposed as well as the amount of use. Therefore, a service lifespan of 3 to 5 years from date of purchase can be expected, after which time it should be replaced. Shorter lifespans could be experienced and the following inspection recommendations are therefore important in ensuring continuing safe operation.

Inspection

- 1.0 The deck switch and the system it controls should be fully tested in a 'No Load' condition prior to full functional operation as per it's design purpose, before every trip, activity or task. Only after the skipper has satisfied themselves of the safe and functional operations should the equipment be used.
- 2.0 The deck switch should be inspected pre-departure or use paying particular attention to the following:
 - 2.1 Ensure there is no visible damage to the switch
 - 2.2 Ensure there is no noticeable wear to the switch, it's housing, it's button or fixings
 - 2.3 Ensure the rubber membrane over the switch is not sticky or has any deposits or residue from cleaning fluids or other prohibited materials
 - 2.4 Ensure the rubber membrane over the switch does not show any signs of cracks, splits or signs of degradation. This includes a change in colour from shiny to a matt finish
 - 2.5 The main switch housing should not have any visible chips or cracks
 - 2.6 The switch should have a smooth positive feel with a distinct click that can be felt at the point of operation
 - 2.7 There should be no signs of water ingress on any part of the switch assembly
 - 2.8 Ensure that the fixings screws and seal to the deck bulkhead or coach roof are secure, and remain effective in both securing the switch and preventing water ingress
 - 2.9 The switch should not feel spongy and should not make a squelch or bubbling noise due to water ingress when depressed and operated

NOTE

If any of the points highlighted in 2.0 through to 2.9 are detected during inspection, the deck switches should not be used and should be replaced.

- 3.0 On an annual basis the deck switch should be removed by a qualified electrical technician to carry out the following:
 - 3.1 All the checks detailed in 2.0 2.9 of this product service update
 - 3.2 Inspect the underside of the deck switch for signs of corrosion, damage or water ingress
 - 3.3 Inspect the wiring for signs of loose connections or corrosion
 - 3.4 In open circuit mode (OFF) condition the resistance should be checked for a recording on the test meter beyond measurement to confirm no electrical connection.
 - 3.5 In closed circuit mode (ON) condition, the resistance should be less than 3 Ω (ohms)
 - 3.6 If the switch shows any signs of excessive wear, degradation in it's action, water ingress or loss in it's electrical resistance properties, it should be changed immediately

LEWMAR

DECK SWITCH SERVICE UPDATE JUNE 2011

Additional Guidance

- 4.0 It is the responsibility of the skipper to ensure that crew members are trained in the operation of powered deck equipment and use it in a safe and appropriate way within it's designed operating parameters. This includes what to do in an emergency.
- 4.1 It is the responsibility of the skipper to ensure that crew members are appropriately briefed on all three methods of equipment isolation in event of emergency, i.e.:-
 - 4.1.1 The switch itself and it's operation
 - 4.1.2 The circuit breaker on main panel
 - 4.1.3 The main battery isolation
- 4.2 Crew briefings should always cover the following issues pertaining to deck switch operated equipment:-
 - 4.2.1 Safe operation of any powered deck equipment.
 - 4.2.2 What to do in the event of an emergency
 - 4.2.3 What not to do in event of emergency
 - 4.2.4 A practical demonstration of the effective isolation of deck equipment as highlighted in point 2 above
- 4.3 Deck switches are designed to be used in conjunction with Lewmar equipment only. If they are to be used for the powering of any other electrical equipment the intended use should be checked against the specification of the switch.
- 4.4 Deck switches should only be operated with fingers, bare feet or soft soled shoes.
- 4.5 Switches should be left with the lid closed to minimise environmental degradation and the potential for accidental operation.
- 4.6 Powered deck equipment should always be isolated when not in use to prevent accidental start up.
- 4.7 The instructions for the equipment being operated should always be read and followed.
- 4.8 Power washers should not be used on or near any switch.
- 4.9 It is acknowledged that deck switches will need to be washed down as part of a deck cleaning process. However, direct flow from a non pressure hose should not be aimed at the switch.
- 4.10 The deck switch itself should only be cleaned with a mild soap and washed off immediately with a light application of fresh water.
- 4.11 The following (non exhaustive) list of substances should not be applied, or used on or near any deck switch. Products include but are not limited to:-
 - 4.11.1 Chemicals
 - 4.11.2 Deck cleaners
 - 4.11.3 Petroleum based fluids/cleaners
 - 4.11.4 Deck polish
 - 4.11.5 Deck brightener
 - 4.11.6 Varnish/lacquers/paints
 - 4.11.7 Oil

LEWMAR

DECK SWITCH SERVICE UPDATE **JUNE 2011**

Specific Considerations for Winch Operation Manual B2303 Issue 7

Please ensure that you thoroughly understand the operation and safety requirements of the winch before commencing the installation. Only persons who are completely familiar with the controls and those who have been fully made aware of the correct use of the winch should be allowed to use it. If there is any doubt of how to install or operate this unit please seek advice from a suitably qualified engineer.

- · Winches used incorrectly could cause harm to equipment or crew.
- Winches should be used with care and treated with respect.
- Sailing, like many other sports can be hazardous. Even the correct selection, maintenance and use of proper equipment cannot eliminate the potential for danger, serious injury or death.
- Lewmar winches are designed and supplied for line control in marine applications and are to be used in conjunction with appropriate clutches, cleats and other manual controls and stoppers.
- It is the unavoidable responsibility of the owner or master or other responsible party to assess the risk of any
- Under no circumstances should any self tailing winch be used in self tailing mode for any lifting operation; rather suitable and adequate manual tailing should be arranged with proper means of manually cleating or stopping the hoist.
- Every winch should be installed with adequate means of manually cleating or stopping the loaded ropes.

Specific Considerations for Windlass Operation Manual 65001201 Issue 2

<u>Windlass Operation</u>
Classification Societies and Lewmar require that a vessel at anchor must have its rode held by a chain stopper or equivalent strong point at all times!

At all times it is the responsibility of the boat user to ensure that the anchor and rode are properly stowed for the prevailing sea conditions. This is particularly important with high-speed powerboats, because an anchor accidentally deploying while under way can cause considerable damage. An anchor windlass is mounted in the most exposed position on a vessel and is thus subject to severe atmospheric attack resulting in a possibility of corrosion in excess of that experienced with most other items of deck equipment. As the windlass may only be used infrequently, the risk of corrosion is further increased. It is essential that the windlass is regularly examined, operated and given any necessary maintenance.

Please ensure that you thoroughly understand the operation and safety requirements of the windlass before commencing the installation. Only persons who are completely familiar with the controls and those who have been fully made aware of the correct use of the windlass should be allowed to use it. If there is any doubt of how to install or operate this unit please seek advice from a suitably qualified engineer.

Page 3 of 4

LEWMAR

DECK SWITCH SERVICE UPDATE JUNE 2011

- · Windlasses used incorrectly could cause harm to equipment or crew.
- · Windlasses should be used with care and treated with respect.
- Sailing, like many other sports can be hazardous. Even the correct selection, maintenance and use of proper equipment cannot eliminate the potential for danger, serious injury or death.
- Lewmar windlasses are designed and supplied for anchor control in marine applications and are not to be used in conjunction with any other use.
- It is the unavoidable responsibility of the owner or master or other responsible party to assess the risk of any
 operation on the vessel.

Additional Information

• Lewmar recommends the use of appropriate Personal Protective Equipment and hands free communication equipment by any person going aloft, and only then where the person going aloft is properly trained in the use of that equipment and where there remain sufficient trained and experienced personnel on deck to ensure constant observation and the continued safe conduct both of the vessel and the hoisting operation.

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7.13 Hurricane Preparedness

North Carolina MARINA / BOATYARD HURRICANE PREPARATIONS

CUSTOMER CHECKLIST Equipment To Be Kept On Board: chafing gear flashlight with spare batteries fenders ■ battery-operated radio ■ two sufficient anchors with 300' or more oversized rode Check Monthly: exterior lights operable engine battery charged □ auto bilge pump operating (check battery) flashlight battery charged hatches are watertight radio batteries charged power and electric gear operating To Do At A New Marina: learn marina approaches and basin learn the size and type of your mooring ensure mooring and lines are sufficient for all likely wind direction and velocity ensure mooring has enough weight and scope and is properly set □ learn your moorage lease and rental agreement responsibilities learn responsibilities for your boat's safety when a hurricane is approaching develop a plan for securing your vessel outside the marina if you plan to evacuate if evacuating, visit the site by boat and time the trip learn what possible delays you may encounter when evacuating (drawbridges, boat traffic etc.) photograph your boat and surroundings keep a list of all equipment on board keep a list of all equipment that will be removed during storm preparations keep a complete set of records for your boat at home give the marina operator the name and number of your absentee skipper give the marina operator a description of your boat, registration number and location DOCKED BOAT PREPARATIONS strip all removable items, including spare leave auto bilge pump on check openings to ensure boat is watertight rigging clear self-bailing cockpit drains set and check storm anchors close all through-hull fittings consider attaching 3 sets of bow and stern spring set chafing gear where lines will rub (chocks, cross lines, deck edge, dock edge etc.) consider attaching lines to cleats at a 45 degree remove portable fuel and oil storage containers remove ship papers consider tying your boat between two piers or shut off fuel tanks along a pier and anchored off one side □ leave anchor light on

NC Boating Industry Services (919) 715-7668 (919) 715-7777 fax Page 6 of 8

North Carolina MARINA! BOATYARD HURRICANE PREPARATIONS

MOORED BOAT PREPARATIONS

| | Make Plans To Have Someone Pick You Up From Your Boat Before The Storm Arrives |
|-----|---|
| | strip all removable items, including spare rigging |
| | clear self-bailing cockpit drains |
| | close all through hull fittings |
| | remove portable fuel and oil storage containers |
| | remove ship papers |
| | shut off fuel tanks |
| | leave anchor light on |
| | leave auto bilge pump on |
| | check openings to ensure boat is watertight |
| | use storm pennants to increase scope |
| | attach chains directly to pennants instead of swivels |
| | add an emergency catenary weight at the vessel end of the chain |
| | use double or triple chafe protection |
| | use chafing gear over entire length of pennants |
| | use two pennants |
| | if no permanent mooring is available, use two storm anchors at 45-degree angles |
| Sto | RAILERABLE BOAT PREPARATIONS ore in a garage: strip all removable items, including spare rigging clear self-bailing cockpit drains close all through-hull fittings remove portable fuel and oil storage containers remove ship papers shut off fuel tanks leave auto bilge pump on check openings to ensure boat is watertight |
| | |
| | secure trailer to a sturdy object let half the air out of the trailer tires put wood blocks between the frame and axle take out the drain plugs cover with tarp use tie-downs |
| | |
| | |

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North Carolina MARINA / BOATYARD HURRICANE PREPARATIONS

ANCHORED BOAT PREPARATIONS

| Ma | ike Plans To Have Someone Pick You Up From Your Boat Before The Storm Arrives |
|----|--|
| | strip all removable items, including spare rigging clear self-bailing cockpit drains close all through-hull fittings remove portable fuel and oil storage containers remove ship papers shut off fuel tanks leave auto bilge pump on check openings to ensure boat is watertight |
| | use 3 or 4 substantial anchors and good tie rope |
| | tie your boat high on the mainland to a substantial tree or similar structure do not tie parallel to the bank |
| | keep a navigable passage at your stern to allow other boats passage |
| | use enough line to allow for storm surge |
| | leave enough room between your boat and others to allow for swing |
| | take valuables off |
| | |
| | |
| | |
| | |

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Chapter 8: 2014 WARRANTY POLICY

- 1. <u>Ten Year Limited Hull Warranty.</u> HC Composites, LLC, herein defined as "Glacier Bay", warrants to the original retail purchaser ("Purchaser") that for ten (10) years after the date of delivery to its original retail purchaser, each new fiberglass hull (defined as the one piece fiberglass molded part that acts as the vessel's running surface during operation), manufactured by HC Composites, LLC shall be free from structural defects due to material or workmanship under normal non-commercial use. In the event that HC Composites, LLC determines that the boat must be replaced, then the value offered towards the replacement boat is the factory invoice for the boat. Transfer of all accessories including engines will be at the owner's expense. At HC Composites, LLC discretion the replacement model will be an upgraded model if the original model is no longer offered.
- **One Year Components Warranty.** HC Composites, LLC warrants to Purchaser that for one (1) year after the date of delivery to its original retail purchaser, all boat components manufactured by HC Composites, LLC shall be free from defects due to material or workmanship under normal non-commercial use.
- **3. Exclusions.** This limited warranty does not cover and does not extend to any of the following: (a) Hull or component failure caused by normal wear and tear, climatic conditions, misuse, neglect, lack of proper maintenance, accident, fire or other casualty damage, racing, overloading, negligence, modification, or commercial use; (b) windshield leakage or breakage; (c) repaired or replacement components not installed by Glacier Bay, unless installed by Glacier Bay selling dealer in accordance with this warranty; (d) fading, chalking, blistering or cracking of any varnish, gelcoat, paint, anti-fouling coating or metallic finish; (e) tears, cracking, fading, discoloration or mildewing of curtains, cushions, tops, headliners or other fabric or upholstered items; (f) cost of removal or reinstallation of any component (including components manufactured by Glacier Bay), or disassembly and reassembly of the unit containing the component; (g) speed, weight, fuel consumption and other performance characteristics of the boat. ANY ORAL STATEMENT OR PRINTED ADVERTISING REGARDING ANY PERFORMANCE CHARACTERISTIC OF THE BOAT OR ITS COMPONENTS SHALL BE CONSIDERED AN ESTIMATE ONLY AND SHALL NOT BE RELIED UPON AS EXPRESS WARRANTY OR AS A BASIS OF THE BARGAIN FOR THE BOAT OR ITS COMPONENTS; (h) electrolysis, galvanic corrosion, crevice corrosion, stray current or any deterioration of underwater components; (i) components not manufactured by HC Composites, LLC, whether or not warranted by the other manufacturer, even if installed by HC Composites, LLC, including but not limited to engines, propellers, generator sets, controls, electronics, batteries, appliances and air conditioning. _(customer initial) Warranties provided to HC Composites, LLC by component manufacturers shall be passed on to purchaser to the extent such transfer is permitted by the manufacturer; HC Composites, LLC selling dealer will identify the authorized service dealer for any such components upon request.
- 4. <u>Limitations/No other Warranties.</u> THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS SHALL BE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND GLACIER BAY SOLE AND EXCLUSIVE LIABILITY UNDER THIS WARRANTY. HC Composites, LLC obligation under this warranty is limited to the repair or replacement (at HC Composites, LLC sole election) of any covered item found to be defective, when delivered by Purchaser pursuant to written authorization and instructions from HC Composites, LLC, round-trip transportation prepaid, to HC Composites, LLC manufacturing plant or other designated repair facility <u>(customer initial)</u>. Repaired or replaced items are warranted as provided herein for the unexpired portion of the applicable warranty period. THIS WARRANTY, AND THE RIGHTS AND REMEDIES UNDER IT, IS EXCLUSIVE AND IS GIVEN IN PLACE OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, WHETHER ARISING BY LAW, CUSTOM, CONDUCT OR USAGE OF TRADE. PURCHASER'S REMEDIES SHALL BE LIMITED AS STATED HEREIN AND HC COMPOSITES, LLC SHALL NOT BE LIABLE FOR ANY INCIDENTAL.

CONSEQUENTIAL OR INDIRECT DAMAGES OR LOSSES RESULTING FROM DEFECTS. THIS LIMITED WARRANTY GIVES PURCHASER SPECIFIC LEGAL RIGHTS. PURCHASER MAY HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE. IN THE EVENT THAT IMPLIED WARRANTIES ARE FOUND TO EXIST UNDER THE LAW OF A PARTICULAR STATE NOTWITHSTANDING THE EXCLUSION CONTAINED HEREIN, THE DURATION OF ANY SUCH WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE LIMITED WARRANTY STATED HEREIN. THE SELLING DEALER IS NOT A CO-WARRANTOR AND IS NOT AUTHORIZED BY HC COMPOSITES, LLC TO AMEND OR MODIFY THIS LIMITED WARRANTY IN ANY MANNER.

- **5.** <u>Dispute Resolution</u>. Any controversy or claim arising out of or related to this Agreement or to the relationship created hereby, whether at common law or under statute, shall be settled exclusively by binding arbitration conducted in Edgecombe County, North Carolina, pursuant to the North Carolina Commercial Arbitration Act (the "Act").
- **6. Predelivery Examination.** Purchaser represents to HC Composites, LLC that Purchaser has examined the boat and all its component parts, accessories and equipment, to Purchaser's full satisfaction prior to accepting delivery of the boat from HC Composites, LLC, or in the alternative, has been given full opportunity to do so and has declined. _____(Customer initial)
- opportunity to do so and has declined. ______(Customer initial)

 7. Single Transferability of Warranty. Coverage remaining under the Warranty Periods may be transferred by an Authorized HC Composites, LLC, Dealer to a 2nd purchaser for a \$395.00 fee. The transfer must occur within five (5) years of the original date of retail sale. The transfer fee must be paid within thirty (30) days of purchase of the used boat to transfer the warranty. A copy of the bill of sale from the original owner or Authorized Glacier Bay Dealer is required and completion of this form. HC Composites, LLC, reserves the right to reject any warranty transfer request for a boat that has been damaged, neglected or otherwise previously excluded from warranty.
- **Miscellaneous.** HC Composites, LLC reserves the right to make changes in the design and construction of its products at any time, without notice and without any obligation to incorporate such changes into products of prior manufacture. This limited warranty applies to new boats manufactured by HC Composites, LLC, except as such limited warranty may be transferred to a subsequent purchaser as provided herein. The term "new boats" shall include boats that may have been repaired during the manufacturing process as part of HC Composites, LLC quality assurance program. This limited warranty contains the entire agreement between HC Composites, LLC and Purchaser and supersedes all prior agreements, discussions, negotiations, commitments and representations, whether oral or written, between them regarding HC Composites, LLC warranty. If any provision of this limited warranty, or the application of it, is determined to be invalid of unenforceable for any reason, the remainder of this limited warranty and the application of it shall not be affected. All communications and notices from Purchaser regarding this limited warranty should be sent to: HC Composites, LLC, 1090 West Saint James Street, Tarboro, NC 27886 or fax to 919-882-8035
- **Acknowledgment of Limited Warranty.** By signing below, Purchaser (or each Purchaser, if more than one) agrees that he or she has read this limited warranty in its entirety and understands its terms and conditions. Purchaser (or each of them) acknowledges receipt of a copy of this limited warranty at the time of the sale.

| WARRANTY REGISTRATION | |
|-------------------------------------|---|
| Purchaser's Name | Purchaser's Phone Number |
| Purchaser's Street Address | Date of Delivery |
| Purchaser's City, State and Zipcode | Hull Identification Number |
| Purchaser's Email Address | Name of Selling Dealer |
| Purchaser's Signature Original | Dealer's Sales Representative Second Owner |

Chapter 9: 2770 OPERATION AND SCHEMATICS

9.1 OPERATION OF STANDARD EQUIPMENT

9.1.1 <u>Battery Layout and Management</u>

The 2770 is equipped with three batteries, which are located in theaft battery compartment on the transom wall.. A cranking battery is installed on each side, and a dedicated house battery is installed in the center. Wire leads run through the hull harness to the battery management panel which islocated under the helm seat. See section 6.5 & 6.5.1 for information regarding the operation of this panel. The engine cranking leads run aft, through a hull rigging tube, The negative engine leads are connected to the common battery ground using a negative buss also located in the aft rigging compartment.

The house battery provides the power for a majority of your DC accessories. The main battery lead runs to the "HOUSE" switch on the battery management panel. From there current is routed to the dash and circuit breaker through the 50 amp "DC Main" breaker located in the left side of the battery management panel. During normal operation this breaker can remain in the "ON" position, and the "HOUSE" switch can be used to control the flow of current. The main ground for all DC accessories is tied into the common ground on all batteries. For a detailed drawing of the battery management panel connections, see section 9.4.5.

9.1.2 <u>Additional Emergency Parallel</u>

As an additional feature, the 2770 management panel contains a secondary "EMERG PARALLEL" switch. It allows you to mechanically link the starboard "cranking" battery to the house battery. Furthermore, engaging both "EMERG PARALLEL" switches will connect all three batteries into a single bank. The switches should remain in the "OFF" position when not in use. To prevent voltage spikes or drops which can damage electrical components, you should trip the DC Mains 1 breaker prior to cranking engines with the house battery in parallel. Once you are running, the breaker can be reset to allow the full alternator output to power the electronics. This is a safety feature and should not be used in-lieu of the VSR's to charge batteries while underway. Doing so, could result in premature battery failure and increases the risk of electrical failure while at sea.

9.1.3 Bilge Pumps / Float Switches

Your 2770 is equipped with two 1500 GPH bilge pumps located aft and two 500 GPH pumps forward. Each pump is connected to a float switch which automatically triggers the pump when water comes to rest in the bilge. The float switches are connected to the battery management panel through the hull harness and receive power from the breakers on the right side of the panel. These breakers are constantly energized and ensure the safety of your boat even when the battery switches are in the "off" position. The pumps can be manually engaged using the switch at the dash.

The aft bilge pumps are located behind the aft rigging compartment and can accessed through the inspection plates in the motorwell, forward of the engines. The forward bilge pumps are located under the inspection plate in front of the head in the portside cabin and under the starboard side storage liner .. The wiring for these pumps is secured to the centerline stringer which is visible from the hatch. Inspect the operation of your bilge pumps and their connections at least annually. To do so, activate the pump by removing the pump from the base and flipping it upside down. Then check the operation using the manual switch. Keeping your bilge areas clean can also help extend the life of your pump.

9.1.4 Freshwater System

The freshwater pump is mounted to the starboard hullside and can be reached by removing the battery management panel or the trash can compartment behind the sink. The pump is connected to the 20 gallon freshwater tank located in the hull forward of the starboard fuel tank. The tank is filled through a fitting located on the starboard side of the deck. Similar to residential well pumps, the freshwater pump pressurizes the system to 45 psi. then shuts down until the pressure drops below that level. Most owners leave the pump "on" throughout the day, and use the system when necessary. On the 2770 the freshwater pump feeds the pull out shower located on the aft transom wall, freshwater wiper rinse, sink and the marine head. To view the layout of the freshwater system see see section 9.4.8.

9.1.5 Seacocks

Ball valves (seacocks) are installed on the water intake for both the livewell and raw water system. The seacock must be in the open position for these systems to work. When open, the handle will be parallel to the valve. In the closed position the handle is perpendicular to the valve (see picture below). Glacier Bay recommends that the seacocks remain in the closed position when not in use, or when the boat is left unattended to prevent the vessel from taking on water due to a plumbing failure.





CLOSED

OPEN

9.1.6 Livewell System

The 2770 has a 25 gallon livewell system, which is supplied by a dual purpose livewell pump. The pump is located in the port bilge compartment and can be reached through the inspection port in the motorwell. The wiring is secured to the pump using a tie-strap, and must be disconnected prior to removing the pump.

The livewell pump draws water through the strainer mounted on the inboard side of the port sponson. A seacock is installed between the pickup and the pump to allow you to seal the system between use, or in the event of a plumbing failure.

To operate the livewell, first verify that the seacock is open, then plug the bottom drain with the livewell plug supplied. When you have completed these steps, engage the livewell pump using the switch at the dash. Water will fill the tank until it is level with the overboard drain, which evacuates water through the hullside. When you have finished using the livewell, remove the water by removing the livewell plug from the bottom drain.

NOTICE

While underway, leaving your livewell seacock open could result in inadvertently filling your livewell. To prevent this, close the seacock when the pump is not in operation.

NOTICE

Operating the engines in reverse can cause excessive ventilation near the livewell intake, causing the pump to airlock. To prevent this, turn the pumps "OFF" prior to any continuous or high speed reverse operation. If your pump does becomes air locked, turn the pump "OFF" for 15 to 30 seconds to correct the problem.

9.1.7 Raw Water System

The raw water pump and strainer are mounted on the rigging wall in the port bilge compartment, which can be accessed through the motorwell hatch. The strainer is connected to a high speed pickup through the seacock located on the inboard side of the starboard sponson. The seacock must be open for the system to work. Similar to the freshwater pump, the raw water system in controlled by a pressure switch set at 45 psi. The pump will cycle on and off as needed to maintain this pressure. Most owners leave the pump "on" throughout the day, and use the system when necessary. On the 2770 the raw water pump feeds the raw water outlet located under the livewell on the portside. To view the layout of the raw water system see see section 9.4.8.

9.1.8 Marine Head

The 2770 comes equipped with a marine head. The control panel for the head is located on the head instrument panel located under the cabin entry steps. Power is supplied to this panel through a 25 amp breaker located on the battery management panel.

Water is supplied to the system from the freshwater tank; therefore, to operate the toilet the freshwater system must be pressurized. A solenoid, installed near the head inlet, prevents water from filling the bowl prior to each use. The macerator pump, located at the rear of the toilet, removes waste from the bowl and pumps it into the 15 gallon holding tank.

!!! WARNING

If the solenoid fails or becomes locked in the open position, shut off the supply system quickly and evacuate the bowl.

The holding tank is mounted in the port hull forward of the gas tank, it can be accessed by removing the tackle center under the livewell. This tank can be evacuated using the deck pump-out fitting located on the port side of the deck near the helm or by overboard discharge using the macerator pump and seacock supplied on your vessel. To access the seacock, remove the starboard cabin storage panel located under the mattress. Open the seacock and use the keyswitch on the head switch panel to evacuate the tank.

1.1.1.1.Initial Start Up

On each trip, prior to using the head, complete the following steps:

- Turn on the freshwater system.
- Fill 1/3 of the bowl with water using the lower switch on the control panel
- Hold down the flush switch for 5 seconds to evacuate the bowl and refill with water.

1.1.1.2.Normal Use

Use the steps below for normal operation.

• Hold the upper switch on the panel down for 5 seconds. This will purge the bowl and refill it with water.

In the event of inclement weather or rough seas, use the lower switch to remove water from the bowl and prevent sloshing.

!!! CAUTION

Large quantities of waste or paper can clog the head and cause odor issues. To prevent this, flush often and if necessary perform an extra flush to purge the discharge line.

!!! CAUTION

Do not dispose of foreign objects in the head. Doing so may damage the macerator pump or outlet hoses. Clogging or puncturing these lines will lead to odor problems.

1.1.1.3.<u>Deck Pump</u> <u>Out</u>

Upon returning, use the following instruction to empty the holding tank.

- Remove the cap from the deck pump-out fitting located on deck, outboard of the helm position.
- Use the vacuum hose at the pump-out station to clean the tank, then remove the hose and replace the deck fitting.

1.1.1.4.Overboard Discharge

Use the following steps to discharge the contents of the holding tank overboard:

- Open the overboard discharge seacock. To access, open the inspection hatch installed in the port gunwale near the helm.
- Use the keyswitch located on the head switch panel to evacuate the tank.
- Inspect the tank level and repeat step 2 if needed, otherwise close the discharge seacock.

!!! CAUTION

Discharging waste in inland waters and some coastal areas is illegal. Check with local and state authorities in your region to determine the proper method for waste disposal.

For more instructions on operation, winterization and troubleshooting the marine head, see the JabscoTM manual supplied in your "Owner's Portfolio".

9.2 MAXIMUM HORSEPOWER RATING: TWIN 150 4-STROKE HP (300 HP TOTAL)

9.3 OPERATION OF OPTIONAL EQUIPMENT

9.3.1 Stereo

Your 2770 is equipped with a stereo unit. The unit is mounted on the helm bulkhead. Two speakers are mounted in the cockpit, and the remaining two are installed inside the cabin birth... Power is supplied to the stereo through an accessory fuse block therefore, the "house" battery switch must be in the "on" position to use the unit.

9.3.2 Anchor Windlass

Glacier Bay provides an optional anchor windlass manufactured by Simpson LawrenceTM. If you choose this option, you will receive the windlass, an anchor, anchor rope, and chain which is matched to your vessel's size. The rocker switch to control the windlass is mounted at the helm, and foot switches are installed at the windlass. The manufacturer's instruction manual is provided, in the "Owner's Portfolio", detailing their use.

The circuit breaker for the anchor windlass is mounted in the center of the battery management panel. The panel is connected to the "Stbd Start" battery switch. If you choose not to have the factory install your windlass, Glacier Bay provides wires in the deck harness to allow for aftermarket installs. Regardless of type, a directional control solenoid and rocker style switch will be needed to add the aftermarket windlass.

Please refer to the windlass's user manual for proper installation.

9.3.3 <u>Shorepower/Charger/Microwave-Package</u>

Combined with the battery management system, this system helps ensure that your vessel will be ready to fish whenever you are. The charger is located on the bulkhead under the livewell on the portside to access open the hatch located beside the livewell compartment. The shorepower package includes a shore power inlet and cordset (30 Amps), AC distribution panel, microwave, five (110 V) receptacles and battery charger. Following are instructions on the function and proper use of these accessories.

1.1.1.5. Connecting Shore Power

The shore power inlet is located on the outboard vertical wall of the starboard motorwell. Use the following steps to help protect your vessel and yourself.

- Before connecting the cordset, turn the "AC Main" breaker and all accessory breakers to the "OFF" position. The breakers are installed on the AC panel located on the upper galley cabinet in the cabin.
- Connect the cordset to the boat first, by plugging it into the receptacle and tightening the trim ring.
- Once these steps are completed, attach the cordset to the outlet supplied by the marina.

1.1.1.6. <u>DisConnecting Shore Power</u>

To disconnect the shore power cordset, reverse the procedure above.

- Turn the "AC Main" breaker and all accessory breakers to the "OFF" position.
- Unplug the cordset from the marina supplied outlet, then unscrew the trim ring and remove the cordset from boat's inlet.

9.3.4 Microwave

Microwave is located in the portside cabin birth. It operates exactly like a residential unit, and functions only when you are connected to ship or shore power. Please refer to the Microwave user manual for proper operation.

9.3.5 AC Panel

The AC distribution panel is installed in the cabin behind the helm area. This panel houses the circuit breakers for the AC system and its accessories. The panel also contains a reverse polarity indicator. Reverse polarity occurs when the AC power lead (black) and the AC grounded lead (white) are reversed. This can destroy appliances and create the potential for electric shock. Therefore, after attaching the shore power, turn the "AC MAIN" breaker "ON" first and inspect the reverse polarity indicator. If the LED indicator remains unlit, you can engage the remaining accessory breakers. If the indicator light turns red, immediately turn "OFF" the "AC MAIN" breaker and disconnect the shore power. Notify the marina regarding the issue and have a trained electrician inspect your boat to determine if any damage has been sustained by the electrical system.

9.3.6 <u>Cruiseair Climate Control Package</u>

Glacier Bay provides an optional Cruiseair® 8,000 BTU heating/ cooling unit with vents to the cabin and cockpit for your comfort. The heating/air conditioning unit is mounted under the starboard cabin storage panel located under the mattress. It can be accessed by removing the storage panel above the unit. The filter control panel is located in this bulkhead. Follow these startup guidelines before each use of the unit:

- 1. Verify that the seacock located in the starboard aft bilge compartment is open.
- 2. Using the guidelines provided, energize the AC panel using the generator of shore power connection and engage the corresponding circuit breaker.

- 3. Using the control panel, energize the climate control unit and select the operating mode and desired temperature using the selection tools. This will engage the raw water pump located in the port aft rigging compartment.
- 4. Once the unit is running, inspect for water flow through the system by checking the thru-hull located on the port sponson (see Thru-Hull drawing section 9.4.9). If water is not flowing, shut down the unit immediately to prevent damage. Then have your dealer inspect the system.

Similar to a residential system, the filter units must be replaced at regular intervals to ensure proper operation. Use the manual provided in your "Owner's Packet" to obtain requirements for service, and to get recommendations on usage.

9.3.7 <u>Refrigerator</u>

A DC refrigerator is installed in the cockpit under the starboard sink. The refrigerator is similar to any dorm style unit. The unit is hard wired to the battery management panel, and will operate off battery power while the "HOUSE" battery switch is in the "ON" position.

9.3.8 <u>Cooking Package (propane Grill)</u>

Magma Newport Gourmet Series Gas Grill grills quickly, evenly and disassembles easily for cleaning. Uses inexpensive disposable 1-lb. propane cylinders. Remove from storage and place in mounting brackets on top of gunnel. Make sure the unit is secure before lighting.

9.3.9 TeleflexTM Power Assist Unit

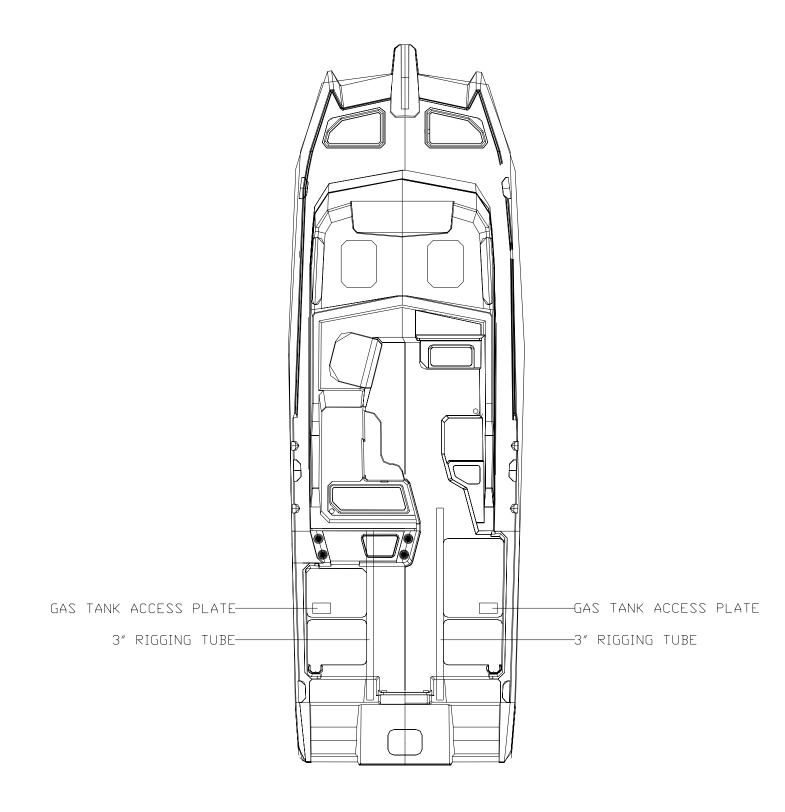
The power assist unit provides automobile like steering on your catamaran. The unit is installed under the starboard cabin storage panel located under the mattress. It can be accessed by removing the storage panel above the unit. The power for the unit is connected to both port and starboard key switches.

9.3.10 Heavy Duty Stainless Steel Lifting Eye

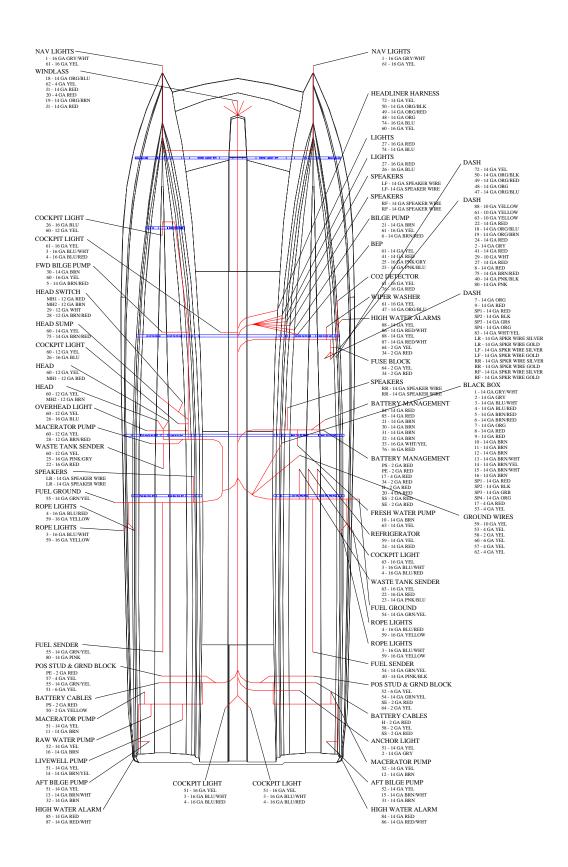
The lifting eye option allows the boat to be lifted from the stern (port & starboard transom eyes) as well as the heavy duty stainless steel lifting eyes located on the port and starboard bow deck. When lifting from these points your straps or cables must be attached so they are vertical and in line above these four points. Spreader bars are REQUIRED when lifting from a single point. The lifting eyes are a TEMPORARY means for transfering your boat to and from the water. These are not designed for storage on divats or lifts.

9.4 SYSTEM DIAGRAMS

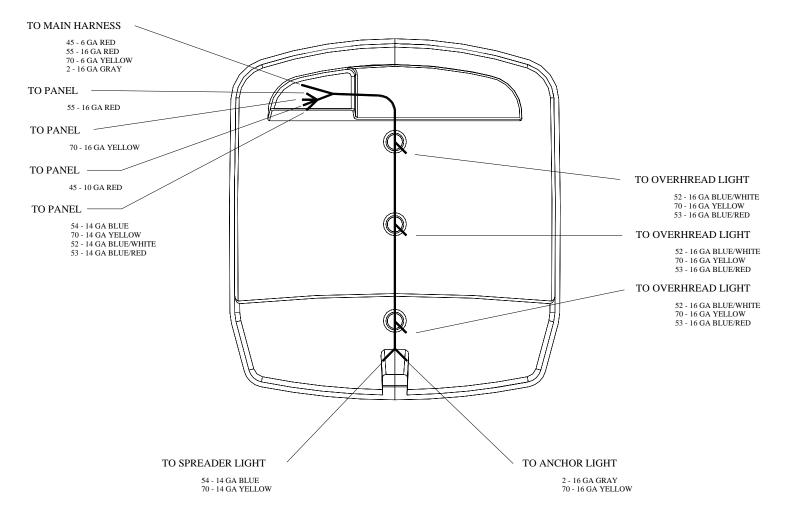
9.4.1 Access Plate and Rigging Tube Diagram



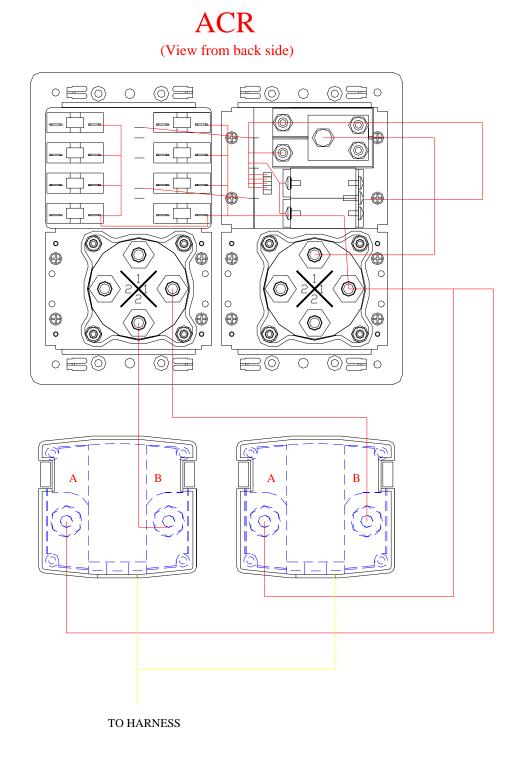
9.4.2 Hull Wiring Diagram



9.4.3 Hardtop Wiring Diagram



9.4.5 Battery Panel Wiring Diagram



BATTERY MANAGEMENT (View from back side) FWD STBD FLOAT 21 - 14 GA BRN FWD PORT FLOAT ∘ ⊟⊚ <u></u> 0 @= 0 30 - 14 GA BRN AFT STBD FLOAT 31 - 14 GA BRN **@** AFT PORT FLOAT 32 - 14 GA BRN 33 - 16 GA WHT/YEL STBD WATER ALARM **O**. (<u>O</u>) • 84 - 14 GA RED PORT WATER ALARM 85 - 14 GA RED o ∰ • **(P) © ©**

HOUSE BATTERY

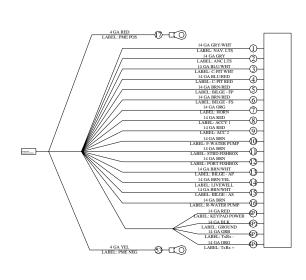
PME & FUSE BLOCK

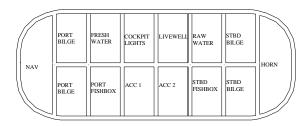
WINDLASS

STBD ENGINE PORT BATTERY STBD BATTERY

PORT ENGINE

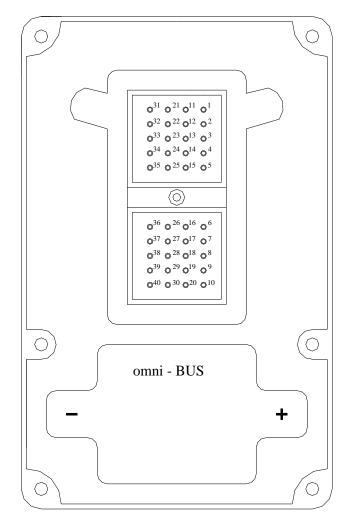
9.4.6 <u>Dash Wiring Diagram</u>





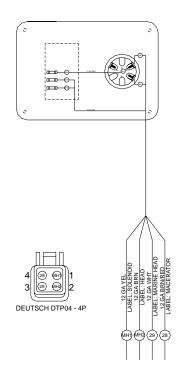
NOTE:

SP1 SP2 SP3 AND SP4 ON 40 PIN PLUG CONNECT TO SWITCH

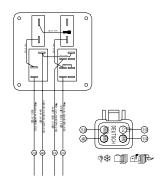


9.4.7 <u>Accessory Panel Wiring Diagram</u>

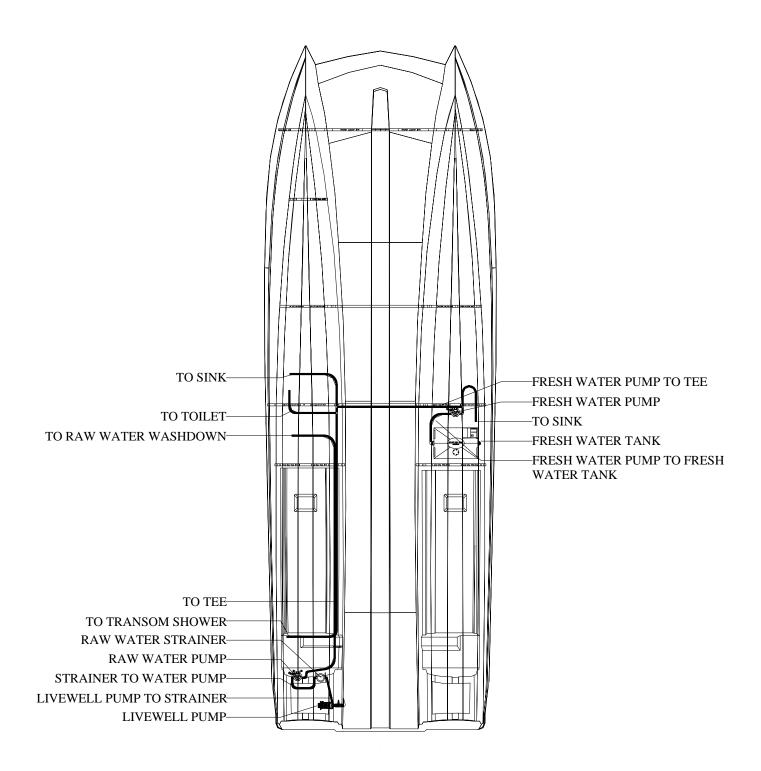
CONSOLE PANEL ASSY.



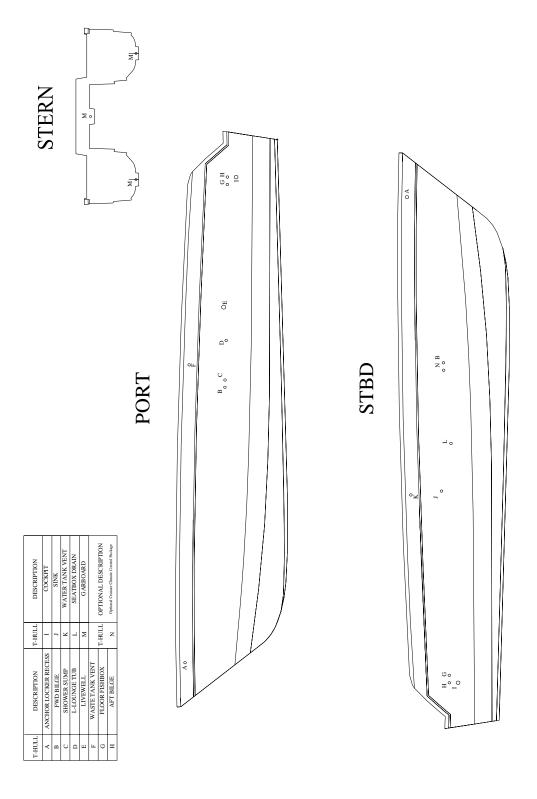
HARDTOP PANEL ASSY.



9.4.8 <u>Water Systems Diagram</u>



9.4.9 <u>Thru Hull Diagram</u>



2014 2770 Spare Parts List

| | | 1014 2110 Spare Latts List |
|-------------------------------------|-------------|--|
| Service Class | Part Number | Description |
| Electrical & Lighting | 20170274 | 12VDC Outlet for Lighter Plug |
| | 20200364 | 2.75" LED Light (Red/Wht) w/Deutsch |
| | 20171495 | 2740/2770 Black Box (Digital System) |
| | 20171494 | 2740/2770 Switch Pod (Digital System) |
| y label trape Continues to total 4. | 20300381 | 2740/2770/2780/255/23DC Hardtop Panel (Pacer Marine) |
| | 20156969 | 2770 Battery Panel Cabinet (Arctic White) (NEW PART) 3/22/2013 |
| | 20156970 | 2770 Electronics Dash Panel (NEW PART) 3/22/2013 |
| | 20156971 | 2770 Hardtop Closeout (Arctic White) (NEW PART) 3/22/2013 |
| · - | 20300373 | 2770/255 Head Panel (Flush, Overboard Discharge) |
| | 20170893 | 30A 125V Easy Lock Inlet SS Shore Power w/Enclosure |
| | 20200332 | 4" LED Light (Red/Wht) |

These parts should be installed by a certified Glacier Bay dealer. Installation by a non-authorized 3rd party may result in improper erforcemance and create safety concerns. Please contact your local, authorized, Glacier Bay dealer to buy these parts at the same price.

| Service Class | Part Number | Description |
|--|-------------|---|
| MATERIAL STATE OF THE STATE OF | 20170956 | Alarm-Co2 Carbon Monoxide |
| | W7013318 | Attwood LED Bow Light (Strb Side No Plug) |
| | W7013317 | Atwood LED Bow Light (Port Side No Plug) |
| | 20200297 | Atwood LED Mast Light (24") - S/S Base |
| Exe [11] | 20171503 | Battery Post Fuse (80A) |
| | 20150379 | Battery Tray (Group 31) - Narrow Width - S/S Rods |
| | 20170277 | BEP Negative Buss Bar HD (300A/4-Pole) |
| | 20190177 | BEP Positive Stud |
| too profile design | W7013397 | BEP Ultra Sonic Sender for 15gal Waste Tank (290EC, 290CC, 320CC, 2740, 2770) |
| High Water Bilge Alarm I grade Alar | 20170922 | Bilge Alarm System (2pcs) |
| BLUS SEA | 20190503 | Blue Sea Charge Relay (ACR) |

These parts should be installed by a certified Glacier Bay dealer. Installation by a non-authorized 3rd party may result in improper erforcemance and create safety concerns. Please contact your local, authorized, Glacier Bay dealer to buy these parts at the same price.

| Service Class | Part Number | Description |
|----------------|-------------|---|
| D | 26500249 | Cabin Receptacle |
| | 90440445 | CmdLink 20' Main Bus |
| - anta | 20173417 | Coastal Plus Wiper Motor 3 1/2" Shaft |
| | 20151493 | Day/Night (3" Rnd) White - w/Battery Backup Solar Mini-Vent |
| | 20170335 | Deka Battery (Group 31/Std)-House (DP31DT) |
| | 26500388 | Dometic Digital Display (White) |
| | 20170360 | Dual Direction Ctrl 12V (PM) |
| | 20300372 | Glacier Bay 2770 Battery Mgmt Panel - Blue Sea 365 |
| O MINICAMA O D | 20170361 | Guarded Rocker Switch |
| | 26500480 | Isotherm CR42 S/S AC/DC Refrigerator (Left-Hinge) |
| | 20173481 | Jensen Marine 6.5" White Speaker |

These parts should be installed by a certified Glacier Bay dealer. Installation by a non-authorized 3rd party may result in improper erforcemance and create safety concerns. Please contact your local, authorized, Glacier Bay dealer to buy these parts at the same price.

| Service Class | Part Number | Description |
|------------------|-------------|--|
| | 20173405 | Jenson JMS2212 200W, Marine AM/FM/WB/USB/Sirius/iPod® Black Box Stereo |
| | 20171441 | Jenson Marine Interface AUX/USB |
| | 20200283 | LED Bow Lights (PR) |
| | 20200291 | LED Overhead Light (2.75") |
| | 20170371 | Lewmar ProFish 700 Windlass - Freefall |
| | 20170874 | Lewmar Windlass Up/Down Foot Switches (Black) |
| | 26500467 | Microwave Cabinet Hold Board (2770) |
| | 26500501 | Microwave-Current Model .7 CU 120v/60Hz, UL (Prefer Black) |
| E. A. | 26500250 | Outlet Box |
| MAZIT JAWA LIPEL | 20300379 | Pacer Tank Monitor Panel (Waste/FW) (Replaces BEP Monitor) |

These parts should be installed by a certified Glacier Bay dealer. Installation by a non-authorized 3rd party may result in improper erforcemance and create safety concerns. Please contact your local, authorized, Glacier Bay dealer to buy these parts at the same price.

Panel ELCI 120V 30A 2P 30mA Toggle Breaker

20173457

| Service Class | Part Number | Description |
|--|-------------|---|
| | 20200286 | Pole Light Base, Black SS w/ Locking Collar (2-Pin Light) |
| | 20173375 | ProSafe Galvanic Isolator (30A) |
| Sun Vo | 20173426 | ProSport 20 Plus 3-Bank Waterproof Charger (20A, 50/60Hz 90-135VAC) |
| | 26500248 | Receptacle GFCI |
| TICHIE N. M. | 20170913 | Ritchie Compass (Small Profile) |
| | 20173431 | Sony AM/FM Antenna w/ Amp |
| | 20200277 | Spreader Light (Flush Mount) |
| 4 | 20171501 | Terminal Fuse Block |
| | 20200359 | Vimar 3M Faceplate (Chrome) |
| | 20200361 | Vimar Mounting Frame 2M |
| | 20200360 | Vimar Mounting Frame 3M |

| Service Class | Part Number | Description |
|--|-------------|---|
| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 20200356 | Vimar On - Off Switch |
| | 26500252 | Weatherproof Cover Plate |
| | 26500005 | Weekender Breaker AC Panel 6 Way w/ Double Pole |
| | 20173467 | Wiper Arm (19"-24") |
| | 20160665 | Wiper Blade (18") |
| take. Where Combination Switch take. Market. Market Equipment / Halland | 20170911 | Wiper Controls Backing Plate |
| - Innivitation of the second | 20170880 | Wiper Fluid Reservoir (4 liter) |
| | 20163481 | Wiper Motor Wedge (2770) |
| Fiberglass | 26003399 | Laminated Anchor Locker Lid - Port (GB 2700's) |
| | 26003400 | Laminated Anchor Locker Lid - Stbd (GB 2700's) |
| | 26003502 | Laminated Berth Storage Lid (Fwd) (2770) |
| | | |

| Service Class | Part Number | Description |
|--------------------------|-------------|--|
| | 26003503 | Laminated Berth Systems Lid (Aft) (2770) |
| Rod Holders Not Included | 26003440 | Laminated Deck Cap - Port (2770) |
| Rod Makierz nat included | 26003441 | Laminated Deck Cap - Stbd (2770) |
| | 26003492 | Laminated Deck Plate - Arctic White (8" x 10") |
| Hardware not included | 26003393 | Laminated Fishbox Lid - Port (2740) |
| Hardware not included | 26003394 | Laminated Fishbox Lid - Stbd (2740) |
| 28003411 | 26003445 | Laminated Gas Tank Lid - Port (2770) |
| 25002411 | 26003446 | Laminated Gas Tank Lid - Stbd (2770) |
| | 26003443 | Laminated L-Lounge Seat Lid (2770) |
| | 26003561 | Laminated Step-Lower (2770/80) |
| 1 | 26003560 | Laminated Step-Upper (2770/80) |

| Service Class | Part Number | Description |
|---------------|-------------|---|
| | 26003462 | Laminated Sump Access Plate (2770) |
| | 26000420 | Laminated Swim Step - Arctic White (2600) |
| Fuel System | 26000421 | Laminated Swim Step Lid - Arctic White (2600) |
| | 20180013 | 1/4 PT X 3/8 HB, Brass |
| CCCC 1 | 20160328 | 1/4 PT X 3/8 HB, Brass 90 deg. |
| | 20161408 | 2640 Gas Tank Bracket-Lower (13") |
| | 20161409 | 2640 Gas Tank Bracket-Upper (20") |
| O & P | 20220083 | Attwood FDV Fuel Demand Value (No-Antisiphon) |
| | 20163465 | Attwood Inlet Control Valve (EPA Diurnal) |
| * | 20163464 | Attwood Pressure Relief Deck Fill (Angled Zamak/Chrome) |
| | 20163373 | Fuel Filter Mounting Plate |

| Service Class | Part Number | Description |
|-----------------------------|-------------|---|
| | 20140102 | Fuel Hose 1 1/2" (50'/RL) |
| — (i) | 20140103 | Fuel Hose 3/8" (250'/RL) |
| — (i) | 20140104 | Fuel Hose 5/8" (250'/RL) |
| | 20160504 | Fuel Tank Vent 90 deg - Flush Mount 5/8" |
| | 20220081 | Gas Tank 90 Gal EPA Non-Perm Plastic Tank (Port/Stbd) |
| | 20220039 | Tank Hold Down Brackets (Inca J-Hooks) |
| TAMAHA MANAGER PARTER | 90441543 | Yamaha Fuel Filter/Water Seperator |
| Gel coat | 20040067 | Gel Ext Ashland "Carolina Blue" (552532) |
| | 20040086 | Gel Ext Ashland "Ice Blue" (725362-55GA Drum) |
| | 20040039 | Gel Ext Ashland "SR Arctic White" Gel (120105) |
| | 20040039 | Gel Ext Ashland "SR Arctic White" Gel (120105) |

| Service Class | Part Number | Description |
|--|-------------|--|
| | 20040037 | Gel Ext Ashland "World Cat Exterior" (164922) |
| | 20040098 | Gel Ext Ashland NCP "Sapphire Blue" (RAL-5003) (XXXXXX) |
| | 20040090 | Gel Int Ashland "SR Arctic White" Gel (11 Series) |
| Graphic & Logos | 20690477 | GB Wedge Tapered Graphic - Port (6" x 26' Black -55/ -055 / Light Gold Metallic -3130) |
| GLACURBAY | 20690478 | GB Wedge Tapered Graphic - Stbd (6" x 26' Black -55/ -055 / Light Gold Metallic -3130) |
| GLACIER BAY | 20690434 | Glacier Bay Hullside Logo - 5" x 46" (Black) |
| GLACIER BAY | 20690434 | Glacier Bay Hullside Logo - 5" x 46" (Black) |
| GLACIER BAY | 20690432 | Glacier Bay Hullside Logo - 5" x 46" (White) |
| GLACIER BAY | 20690435 | Glacier Bay Walkthrough Logo - 2" x 18"(Black) |
| A WARNING AVOID PERSONAL BLUIRY STAY RISIDE DECK RALS (AND GATES) WHEN BOAT IS UNDERWAY | 20690384 | Label Warning Entry Door |
| Pathwell batches are heavy, felory can eccur if fees are caught white closing he | 20690394 | Label warning large fishwell lid |

Service Class Part Number Description 20690385 Label warning sml hatch-anchor 20690377 Label, NMMA Certified-Domed Model Designator - Isle Runner 2770 (Black) 20690475 ISLE RUNNER 2770 20163358 NMMA Yacht Plate (Glacier Bay) 20690484 PowerCat Group RTM Coverup (Crystal Cap Foam Backed, 1.5 x 2.25) 60690302 Warning Label - Prop Helm 60690301 Warning Label - Prop Transom Hardware- Deck 20150232 12" Handrail W/ Studs, S/S Part 20150320 18" Handrail 20156916 2600 Swim Step Cover (Arctic White) 20163362 2700 Swim Step Rails w/4 (Backing Plates)

| Service Class | Part Number | Description |
|-----------------------|-------------|---|
| | 20163356 | 2740/2770 Cockpit Drain Cover (14GA S/S) |
| 6 | 26500508 | 2740/2770 Stbd Wetbar Tiltout (Arctic White) (NEW PART) 3/22/2013 |
| 6 | 26500508 | 2740/2770 Stbd Wetbar Tiltout (Arctic White) (NEW PART) 3/22/2013 |
| | 20510929 | 2770 AL Hardtop Frame (2012) (w/ 2 Large Backing Plates) |
| | 20156909 | 2770 Cabin Door w/ Frame (Arctic White) |
| Hardware not included | 20156918 | 2770 Console Footrest Lid (Non-Skid Arctic White KSB) |
| • | 26500509 | 2770 E/C Cabinet (Arctic White) (NEW PART) 3/22/2013 |
| | 26500505 | 2770 E/C Counter Top (Hi-Macs Parma) |
| | 20163514 | 2770 Entertainment Center Grabrail (36") |
| | 20156937 | 2770 Head Cover (Seafoam Starboard) W/Cleat |
| | 20330398 | 2770 Lifejacket Storage Canvas (Tan) - (Port/Stbd) (NEW PART) 3/22/2013 |

| | , | |
|---------------|-------------|---|
| Service Class | Part Number | Description |
| | 20156991 | 2770 L-Lounge Dinette Table (Hi-Macs Parma) (NEW PART) 4/8/2013 |
| | 20156972 | 2770 L-Lounge Storage Cabinet (Arctic White) (NEW PART) 3/22/2013 |
| | 20601071 | 2770 S/S Bow Rail |
| | 26500506 | 2770 Wetbar Countertop (Hi-Mac Parma) (NEW PART) 3/1/2013 |
| | **20310290 | 2770 White Powder Coated 5-Piece Windshield w/ Manual Vent (NEW PART) 3/25/2013 |
| | 20310290 | 2770 White Powder Coated 5-Piece Windshield w/ Manual Vent (NEW PART) 3/25/2013 |
| | 20160229 | 3" Cable Boot, Off White |
| 630 | 20160329 | 3" White Trim Ring (Chaffing Ring) |
| WHEATHM/ | 20150885 | 4" x 10" Almond Plastic Floor Register |
| | 20156881 | 4" x 10" White Plastic Floor Register |
| | 20163444 | 4.5" Cable Boot - Black |

| | 1 | 1E |
|--|-------------|--|
| Service Class | Part Number | Description |
| | 20163444 | 4.5" Cable Boot - Black |
| | 20150233 | 7" Handrail w/ Studs, S/S Part |
| | 20161430 | 8" Neat Cleat |
| | 20156968 | Acrylic Small Hatch-GB White (2770/2740) |
| | 20163361 | Adjustable Windshield Brace (10 1/2"-12 1/2") |
| | 20160470 | Adjustable Windshield Brace (8 1/2"-10 1/2") |
| C | 20210267 | Aluminum Cushioned Clamps (1") |
| ~ | 20210266 | Aluminum Cushioned Clamps (3/4") |
| | 20150333 | Anchor Rode Special 8-Plaited anchor rope (2005) |
| | 20150332 | Anchor Safety Strap (2005) |
| The state of the s | 20150195 | Anchor, Delta 14lb |

| Service Class | Part Number | Description |
|--|-------------|--|
| , sad | 20151458 | Armstrong 8" Watertight Access Plate - White (GB) |
| | 20163486 | ASI Bracket for Gas Shocks |
| 0 | 20163485 | ASI S/S Flat Bracket for Gas Shocks w/10MM |
| | 20150361 | Cabin Cockpit Floor Base Cap |
| | 20150359 | Cabin Cockpit Floor Base, 5" (for Table) |
| | 20150360 | Cabin Cockpit Table Base |
| | 20150353 | Cabin Cockpit Table Post 27" |
| | 26500476 | Cabin Interior Flooring 2770 Teak/Holly (Matte Finish) |
| | 20170217 | Cabin Portlight w/ S/S Ring |
| A STATE OF THE STA | 20160377 | Chrome Vent (3" x 2.5") |
| | 20140107 | Clear Hose 3/8" (200'/RL) |

| - | | |
|---------------|-------------|---|
| Service Class | Part Number | Description |
| | 20160227 | Compass Plate 5 5/8" |
| | 20430001 | Draw Latch (Small Rubber 4.16") |
| | 20160477 | Draw Latch Keeper |
| | 20156911 | Drop-In Tub Cleat/Handle (2740/2770) (Arctic White) |
| F | 26500443 | Faucet - Single Lever/Cold H2O (2740/2770) |
| | 20161421 | Flexible Rub Rail - White 250' |
| | 26500498 | Flush-Mount Transom Seat Cabinet (Port) (2770/2740) (Arctic White) |
| | 26500499 | Flush-Mount Transom Seat Cabinet (Starboard) (2770/2740) (Arctic White) |
| • | 20163466 | Gas Shock 12" Ext. Length, 30lb, 316SS w/ Composite End |
| | 20610391 | GB 26/27 Transom Pre-Bent No Miter Port 304 (Arctic White Rubrail) |
| | 20610392 | GB 26/27 Transom Pre-Bent No Miter Stbd 304 (Arctic White Rubrail) |

| Service Class | Part Number | Description |
|--------------------------------|-------------|--|
| | 20161444 | GB Swim Step Bolts (3/8" x 5" SS HCS) |
| | l | |
| | 20160275 | GEM S/S Lift Handle Latch Lock 3" |
| CLACTER BAY LOGO NOT INCLUDED | 20156994 | Glacier Bay 2700 Transom Door (Arctic White Acrylic) |
| 20151104 Eleft | 20151104 | Grill Mounts (Magma Newport) |
| | 20150317 | Handrail 48" (Pair) |
| | 20156928 | Hatch Molded 11x15 Arctic White (Jim Black) |
| | 20160703 | Hinge 2" x 3" Anchor Lid Style |
| | 20160688 | Hinge UN96 |
| | 20160671 | Hinge, SS Round Side 2 Pin |
| | 20160363 | Holder Magnetic Window 316SS 30 x 15 Strike |
| | 20163504 | IPS 4" Access Plate (Arctic White) |

| Service Class | Part Number | Description |
|--------------------------|-------------|---|
| | 20163472 | IPS 4" Access Plate (Dream White - World Cat) |
| | 20163473 | IPS 6" Access Plate (Dream White - World Cat) |
| | 20163474 | IPS 8" Access Plate (Dream White - World Cat) |
| | 20156912 | Large Access Hatch - 14x23 (Arctic White) |
| | 20160016 | Latch Cam for 250DC/23DC |
| Cup holders not included | 20156923 | Leanbar Drink Holder Insert (Arctic White) |
| | 20163459 | Lewmar SZ-70 Flush Hatch (Smoked Acrylic) |
| | 26500477 | Lewmar SZ-70 Flush Hatch Ivory Trim Ring / Screen Kit |
| O | 20160465 | Lid Lock Spacer 2"-Black |
| £ | 20160687 | Lift Pin, 2" (Swim Platform) |
| | 20160243 | Lifting Eye, Round |

| Service Class | Part Number | Description |
|---------------|-------------|--|
| Service Class | | |
| | 20160357 | Magnetice Door Holder (Proud/Flush) |
| | 20151103 | Marine LP Grill (Magma Newport Gourmet Series) |
| 1 | 20161231 | Medium Anchor Bow Roller SS Captive 3" |
| Not Included | 26500510 | Microwave Cabinet - Weathered Ash Matte Finish (2770) (NEW PART) 3/22/2013 |
| | 20151038 | Pedestal Storage Clips |
| . 1 | 20160579 | Piano Hinge (2.5"W/050) - 16" |
| | 20160580 | Piano Hinge (2.5"W/050) - 19 1/2" |
| | 20610390 | Pre-Formed 304SS & Vinyl Bow Section (GB 2740 Arctic White) |
| | 20156913 | Pulpit Anchor Protection Plate (GB 2700's) (Arctic White) |
| 9-96 | 20163542 | Push to Close Latch, Slide (Non-Magnet) |
| | 20140123 | Rigging Hose-Black 2" (50'/RL) |

| Service Class | Part Number | Description |
|-------------------------|-------------|---|
| | 20150259 | Rod Holder Grommet (3 3/8") |
| u | 20156914 | Rod Rack (2740) (Arctic White) |
| | 20610385 | Rub Rail Arctic White (20ft) (2013 Models) |
| SIS INSERT NOT INCLUDED | 20150252 | Rub Rail Insert - Bendable 304 S/S (16' EA) |
| | 20156872 | S/S 1-Step Short Cup Holder w/ Drain (92mm) |
| | 20156871 | S/S 2-Step Cup Holder w/ Drain (92mm) |
| | 20163391 | S/S 30° Rod Holder (Cast Head, Formed Tube w/ Drain) |
| | 60233231 | Safety Walk 12" x 60' Black (60FT/RL) 60sqft fer roll |
| | 20160044 | Screen for Portlight |
| | 20170254 | Stainless FIAM Horn |
| | 20160236 | Thru Hull Plastic 90 1 1/2" |

| Service Class | Part Number | Description |
|----------------|-------------|--|
| 0 | 20160237 | Thru Hull Plastic 90 3/4" |
| | 20150008 | Toilet Paper Holder (Metal / Base Mount) |
| V. | **20610386 | Transom Molding (Arctic White) 12' EA Thinner / No Holes |
| | 20161420 | White Rubrail Insert (250FT Spools EA) |
| Hardware- Hull | | |
| | 20160242 | 8" Cleat |
| | 20800321 | Aluminum 8"x8"x1/4" Bow Eye Plate |
| 01- | 20161503 | Bow Eye 304SS 1/2" x 4 3/4" GLO, SS Nuts |
| | 20163363 | Brass Motorwell Drain (1"x 4") |
| | 20163500 | Challenger 3-Step Telescoping Transom Ladder (304SS) |
| | 20150225 | Drain Plug (Garboard) |

W7013398 Mounting Plate for 120VAC AC Pump

| Service Class | Part Number | Description |
|--|-------------|---|
| | 20610270 | Rigging Flange (2") Black |
| 9 | 20160640 | Transom End Cap, Nylon, Black |
| | 20160383 | Transom Motor Plate (Lower) |
| | 20161423 | Transom Motor Plate (Upper) - No Branding |
| Plumbing | 20160040 | 1 1/2 3 Way Tee Fitting |
| | 20160537 | 1 1/2" Drain w/ Screen |
| | 20160512 | 1 1/2" Waste Pump Out |
| C MARINE OF THE PARTY OF THE PA | 20160510 | 1 1/2" Water Fill |
| | 20161461 | 1" MPT X 1" HB 90 PVC Elbow |
| | 20160087 | 1/2 PT X 3/4 HB "L",PVC Elbow 1234 |
| | 20160086 | 1/2 PT X 3/4 HB STR.,PVC A1234 |

| Service Class | Part Number | Description |
|---------------|-------------|--|
| | 20160093 | 1/2 PT X 3/8 HB "L", EL1238 |
| | 20740253 | 120VAC Pump for AC |
| | 20160469 | 250DC/2740 Wiper Spacer Block |
| | 20160466 | 3 Way Reducing Tee (1 1/8" x 3/4" x 1 1/8") |
| | 20160039 | 3/4 x 34 HB Tee |
| t | 20160127 | 3/4" Brass Intake w/ Nut Hi-Speed Water Pick up Bronze |
| 1 | 20160127 | 3/4" Brass Intake w/ Nut Hi-Speed Water Pick up Bronze |
| T | 20160542 | 3/8" HB Tee |
| | 20163484 | 4" Transom Shower (Kit) -S/S Cover/Nylon Hose |
| | 20160335 | 5/8" HoseBarb x 3/4" HoseBarb |
| 20160547 | 20160547 | Automatic Float Switch Mounting Brkt |

| Service Class | Part Number | Description |
|---------------|-------------|--|
| | 20160560 | Ball Valve, Brass, 3/4" |
| | 20163379 | Barbed 3/4" 90 Degree Aerator Head-Livewell Inlet w/ Shutoff Black |
| | 20140100 | Bilge Hose 1 1/2" (100'/RL) |
| mmees | 20140099 | Bilge Hose 1 1/8" (100'/RL) |
| ammeet | 20140098 | Bilge Hose 3/4" (100'/RL) |
| | 20160339 | Drain, Head 320EC |
| | 20160094 | Elbow, Faucet 3/4 HB X 1/2 FPT |
| | 20820440 | Headhunter Inlet Strainer (3/4") |
| | 20820440 | Headhunter Inlet Strainer (3/4") |
| | 20161412 | Hose Barb Adapter (3/4" MPT x 1 1/8" HB) |
| | W7013314 | Impeller Kit for Shurflo Macerator Pump |

| Service Class | Part Number | Description |
|---------------|-------------|--|
| | 20150381 | Jabsco Elongated Toilet Electric CE 12V |
| | W7010068 | Jabsco Washdown Quick-Connect |
| | 20740291 | Johnson Multi Port Shower Sump (w/ Ultima Auto Pump) |
| | 20740283 | Macerator Pump w/ 180 Port |
| 4 | 20740248 | Macerator Pump w/ Deutsch Plug |
| | 20160586 | Nozzle for Bulkhead Mount Jet |
| F | 20160536 | Nylon Elbow (3/4" MPT x 1" HB) |
| | 20160364 | Nylon Elbow 3/4" Male PT by 5/8" HB |
| | 20160267 | Nylon Elbow 3/4" Male PT x 3/4" HB |
| | 20160267 | Nylon Elbow 3/4" Male PT x 3/4" HB |
| | 20161489 | Nylon Female Adapter 1/2" FPTx 3/4" HB |

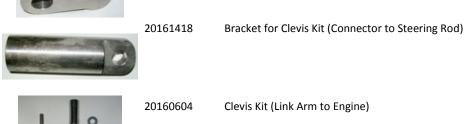
| Service Class | Part Number | Description |
|------------------|-------------|---|
| | 20160142 | Plastic Elbow (3/4") 90 DEG |
| | 20160478 | Quick-Connect Washdown Fitting |
| | W7013346 | Raw Water/Fresh Water Pump Strainer |
| Parties Auderica | 20740299 | Rule-A-Matic Float Switch w/ Deutsch Plug |
| 900 S | 20740250 | Rule-Mate Bilge Pump w/ Deutsch (500 GPH) |
| Tolo Library | 20740298 | Rule-Non Automatic Bilge pump w/ Deutsch (1500 GPH) |
| | 20140128 | Sanitation Hose 1" (100'/RL) |
| | 20140127 | Sanitation Hose 1.5" (100'/RL) |
| 10 | 26500302 | Scandvik Euro Sprayer |
| | 26500275 | Scandvik Euro Sprayer Bracket |
| | 20740302 | Shurflo 800 Bait Sentry w/ Deutsch plug |

| | | 1 |
|---------------|-------------|--|
| Service Class | Part Number | Description |
| NAME: | 20740247 | Shurflo ProBlaster Water Pump w/ Deutsch Plug |
| | 60233362 | Sika White #292i-W High Strength Adhesive Sealer |
| | 20160331 | Stainless Sink Drain |
| T | 20160332 | Stainless Sink Drain Reducer |
| 1 | 20820852 | Strainer Mounting Bracket |
| 1 | 20820852 | Strainer Mounting Bracket |
| | 20161462 | Swivel Nut Water Strainer for Washdown Pumps |
| | 20160355 | Thru Hull Bronze 3/4" |
| | 20160218 | Thru Hull Plastic 1 1/8" |
| | 20160219 | Thru Hull Plastic 90 1 1/8" |
| | 20163451 | Thru-Hull, Resin 90° w/SS Cover, 1" |

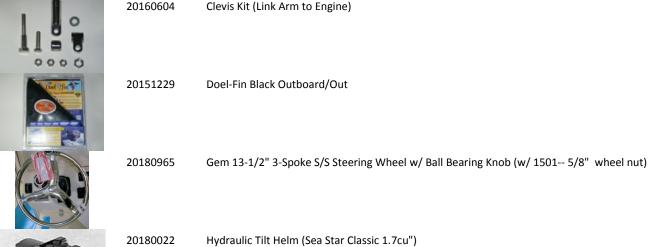
| Service Class | Part Number | Description |
|---------------|-------------|--|
| | 20163452 | Thru-Hull, Resin 90° w/SS Cover, 1-1/8" |
| | | |
| | 20163450 | Thru-Hull, Resin 90° w/SS Cover, 3/4" |
| | 20163450 | Thru-Hull, Resin 90° w/SS Cover, 3/4" |
| | 20163456 | Thru-Hull, Resin w/SS Cover, 1-1/2" |
| | 20163455 | Thru-Hull, Resin w/SS Cover, 1-1/8" - 1-1/4" |
| | 20163457 | Thru-Transom Scupper, Resin, w/ SS Cover, 1-1/2" (4-3/8") |
| | 20160220 | Vinyl Push Plug (1-1/2") Black |
| | 20220037 | Waste Tank 15 Gal |
| | 20220041 | Water Tank 20 Gal |
| | 20161447 | Wingnut Adapter, 90 Nylon 3/4 HB X 1/2 NPT / for Washdown Pump |
| | 20160192 | Wingnut Adapter, Straight Nylon 3/4 HB X 1/2 NPT / for Washdown Pump |

Service Class Part Number 20170912 Wiper Controls Intermittent Switch W7013479 Hatch Arm W7013449 Screen Only for Lewmar SZ-70 Flush Hatch Steering W7010050 50amp Fuse Assembly (for Power Steering) 20160624 Black 5 1/2" Dia Motorwell Boot

Bracket for Clevis Kit (Connector to Engine Mount)



20161419



| Service Class | Part Number | Description |
|---|-------------|--|
| | 20160643 | Link Arm 13 5/8" (2600 Series). |
| | 20161407 | Modified 3" Bolt for Clevis Steering Kit |
| | 20160697 | Mounting Brkt - Steering Cylinder (GB 22/26) |
| | 20160603 | Sea Star CAT Cylinder HC5343 (GB 22/26) |
| | 20161410 | Spacer for Clevis Steering Kit |
| | 90410371 | Suzuki LH Prop (3 x 16 x 20) |
| | 90410370 | Suzuki RH Prop (3 x 16 x 20) |
| DOS, OFFICE CONTROL THE PARTY AND THE PARTY | 20180094 | Teleflex Power Steering Diode (Keyswitch) |
| | 90410444 | Yamaha SS LH Prop (13.75 x 17) |
| Upholstery | 90410443 | Yamaha SS RH Prop (13.75 x 17) |
| ориовает у | 20291003 | 2770 Cabin Pillow (Tide Ale) |

| Service Class | Part Number | Description |
|---------------|-------------|--|
| | 20291004 | 2770 Cabin Pillow (Titanium Pinecone) |
| | 20291005 | 2770 Privacy Curtain (G3651 Dupioni 03 Taupe) |
| | 20290970 | Cushion - Bow Seat (2770) (NEW PART) 3/22/2013 |
| | 20290971 | Cushion Helm Seat w/ Bolsters/Armrest 24"W (2770) (NEW PART) 3/22/2013 |
| | 20290972 | Cushion Lounge Backrest - Center (2770) (NEW PART) 3/22/2013 |
| | 20290979 | Cushion Lounge Backrest - OB Lounge (2770) (NEW PART) 3/22/2013 |
| | 20290973 | Cushion Lounge Seat - Center (2770) (NEW PART) 3/22/2013 |
| | 20290974 | Cushion Lounge Seat - OB Lounge (2770) (NEW PART) 3/22/2013 |
| | 20290978 | Cushion Queen Berth - Aft Cushion, Karma Karmic Cashmere (2770) (NEW PART) 3/22/2013 |
| | 20290977 | Cushion Queen Berth - Fwd Cushion, Karma Karmic Cashmere (2770) (NEW PART) 3/22/2013 |
| | 20290940 | Cushion Queen Berth - Stbd, Karma Karmic Cashmere (2770) (NEW PART) 2/28/2013 |

Service Class

Part Number

Description

20290975

Cushion Straight Coaming - Port (2770) (NEW PART) 3/22/2013



20290976 Cushion Straight Coaming - Stbd (2770) (NEW PART) 3/22/2013



20290968 Cushion Transom Backrest - Port/Stbd (2740/2770)



20290969 Cushion Transom Seat - Port/Stbd (2740/2770)